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ABSTRACT

This handbook offers an organized program to expose kindergarten and elementary school students to the values inherent in participation in a competitive society. It encompasses activities that develop skills in mathematics, language arts, health and physical education, science, social studies, art, and music. Objectives and activities pertaining to the Olympic Games are integrated into the subject areas and skills usually taught in the classroom. Each unit covers specified grade levels and presents purposes and objectives of several subject areas in terms of cognitive and attitudinal outcomes and skills development while incorporating concepts and activities which deal with the Olympics. The activities consist of suggested procedures for the teacher and directions and questions for the students. In addition to the references found at the end of most units, a comprehensive general bibliography is provided. The book is prefaced by a brief history of the ancient Olympic Games, and how the modern games came into being. (JD)

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THE OLYMPICS:

AN EDUCATIONAL OPPORTUNITY

ENRICHMENT UNITS, K-6

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PREFACE

The United States Olympic Committee attaches great significance to the infusion program built around the theme "Olympism." We recognize the great demands on your time, but we also feel that this program has much merit in preparing the youth of our country to be better acquainted with the nations and people around us.

The Olympic Games were once called by the late Avery Brundage, long-time president of the world-wide movement, "the strongest moral force in today's society." There is more to the Olympic Games than good sportsmanship and fair play. The Olympic Games best illustrate the interaction between the peoples of the world without regard to sex, race, color, or religious beliefs.

The Curriculum Planning Committee and curriculum writers, I feel, have skillfully woven together a program which is ideally suited to be "infused" into existing curricula content. The units are flexible and they can be used in part or as a whole.

The program has been designed to assist the teacher who has limited time for research on Olympic matters. I feel that the interest stimulated by the Olympic Games is an important educational asset. Today, there is, in our country, general agreement that the Olympic Games are good for the development of youth, and we hope that these materials will contribute further to their development.

The United States Olympic Committee appreciates the wonderful cooperation from the school community. Without your support we would not have been able to undertake such an ambitious program. You have our best wishes for success in your efforts to educate our youth in and through Olympism.

F. DON MILLER
Executive Director,
United States Olympic Committee

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FOREWORD

In Greece during the period of classical antiquity, the people held a belief in the nobility of mankind that has lasted through the ages. The ancient Greeks idealized human form and grace and beauty. They sought the harmonious development of man in all of his aspects and capacities.

This concept of man's noble destiny saw its fullest expression in the ancient Greek Games, of which the most historically notable were those that took place in Olympia on the plains beneath Cronion Hill. There the great god Zeus looked down on the athletic, cultural spectacle with approval. The Games celebrated not only excellence in athletic performance; they also manifested the highest levels of sportsmanship and ethical conduct. At their zenith, the Games provided a showcase for poets, orators, musicians, philosophers, and statesmen, as well as renowned athletes.

While the ideals of the Olympic Games were kept alive by thoughtful, sensitive men and women for over a thousand years, their form and substance were lost to the world until late in the 19th Century when Baron Pierre de Coubertin rekindled the Olympic Flame. Coubertin envisioned the Modern Games as being both the outcome of and a stimulus to mass participation in sport and physical education by men and women, young and old, throughout the world. The Games would provide the stage for competition among the finest athletes, and an exemplification of the highest levels of sportsmanship and international brotherhood. The Games would also motivate people to enjoy lifelong participation in physical activities and to live in harmony within themselves and with each other. From such mass participation, the best of the performers would emerge and, thus, the cycle would continue. This de Coubertin called the Olympic Movement.

The ideals of the Olympic Games are consonant with the best thought in American education. Have we not, for many years, spoken of "education of the whole child" and "the quest for excellence?" It is this relationship between Olympic ideals, the essential truths of competition, and some of our goals for society through education which we propose to emphasize under the concept of Olympism. This publication offers a practical application of Olympism as an educational program designed to capture the values inherent in competitive activity while enhancing the regular instructional objectives of the classroom.

The units and activities developed for this book may be used to lend an additional dimension to your teaching both between and during the quadrennial Olympic Games. The ideas and strategies they incorporate are but a beginning. The creative teacher will find them a stimulus for many more, perhaps even more effective, activities. We urge you, the administrator, teacher, and interested parent, to use them purposefully.

Simon A. McNeely
U.S. Department of Education

ACKNOWLEDGEMENTS

At the request of the United States Olympic Committee Education Council, these instructional materials were developed, fieldtested, revised, and distributed in New York State during the past two years. These curriculum activities were conducted by the Divisions of General Education and Curriculum Services at the New York State Education Department, Albany, New York with the aid of successive grants from the United States Department of Education's Bureau of Elementary and Secondary Education, State and Local Educational Programs.

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Subsequent to the phase of the project described above, these materials and a companion publication, The Olympics: An Educational Opportunity, Enrichment Units, 7-9, were revised and drafted in a new format. In addition, new unit materials were included.

Dr. Ted Grenda directed this latter phase as well, assisted by Mr. Barry Jamason who developed unit materials and prepared the manuscript for publication. Ms. Sally A. McCracken and Mr. Jack O'Kesson, Liverpool Central Schools, prepared additional unit materials. Ms. Lesa Schissler designed the cover and provided illustrations throughout the publication. Ms. Donna McCarthy typed the manuscript and prepared numerous graphs and charts.

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INTRODUCTION

In a sense, Baron Pierre de Coubertin's view of what the Olympics truly represents was the cornerstone of this curriculum project. As you become involved in using these materials, the Olympics, and the references cited, you will recognize that this French nobleman had a vision in the late 1800's that he managed, by dint of sheer stubbornness and commitment, to bring into being. Baron de Coubertin single-handedly conceived the modern Olympics and has thereby created a worldwide movement that has become a groundswell throughout the world; a groundswell that we are asking you to help us accelerate and amplify. Pierre de Coubertin once said, "The important thing in the Olympic Games is not to win but to take part; the important thing in life is not the triumph but the struggle. The essential thing is not to have conquered but to have fought well. To spread these precepts is to build up a stronger and more valiant and, above all, more scrupulous and more generous humanity."

There are many people in this world who believe, like Coubertin, that sport, competition, and participation in friendly strife have deep educational values that should be available to every individual. They believe that such opportunity for participation should be organized in ways that will make it easy for the citizens of the world to participate and to carry away the lessons of such participation. A broad view of what the Olympics can mean to us places more emphasis on the essence of participation and competition, rather than merely gauging athletic prowess, for the Olympic Games were comprised of more than just athletic events.

Walter Umminger, in his book, Supermen, Heroes, and Gods, writes:

> *"The Greeks do not appear to have been interested in measuring and recording individual feats — in 'records,' in other words. We have already seen how even Bybon's stone fails to mention the crucial point for establishing a record — the distance a weight was thrown. Competing, that was what counted, and if possible putting up a better performance than the other competitors. There were, as time went on, so many classes to compete in. If you were not going to measure yourself against the sprinters or the boxers, you could try improvising poetry, or dancing, or speech making, or playing music — there was even an Olympic prize for trumpet sounding. The trumpeters might be challenged for the same prize by heralds, who would compete against them in the Echo Porch, a long arcade facing west across the center of the Altis. The strength and clarity with which messages could be sent, whether by bugle or by town crier, were essential for public communication, so the contest of both for the same prize was quite appropriate. We are so used to "athletics" meaning only physical exercises and sports that we have to remind ourselves of what the word meant to the ancient Greeks. An "athlete" was quite simply a "competitor" from the word for prize:* athlon. *To them, an athlete was someone who entered for any sort of prize. They did not*

> *separate physical competitions in their minds from competitions in other forms of skill, any more than they separated gymnastics from the mental and physical activities of a man as a whole. Olympia, in Greek eyes, was not merely the mecca of athletics but more than that: it was the human proving ground for the Greek ideal of strong, able, beauty-loving, and wise citizens."*

It is from this perspective that we view the purposes of this publication: an organized program to expose students to the values inherent in participation in a competitive activity. Implicit in this is the belief that a study of the Olympic Games is valuable but not necessarily essential to a grasp of the seminal truth to be found in competition. In support of this contention, the learning activities herein dramatize and illustrate the educational opportunities related to participation in competitive activity as exemplified by the Olympic Games. Rather than "take time out" from the everyday instructional program to deal with the Olympics, objectives and activities pertaining to the Games are built into the normal subject areas and skills preoccupation of the classroom routine. Thus, each unit serves the purposes and objectives of the subject area identified at the outset in terms of cognitive and attitudinal outcomes and skills development while incorporating understandings and activities which deal with the Olympics.

The units are arranged in two sections; K-3 and 4-6. Obviously, a measure of creative adaptation in their use will widen the grade level applicability of most units. Some presumptions about skills, which may not match the particular abilities of your class, have been made. Again, adaptation and accommodation are encouraged.

Each unit begins with objectives which are followed by a series of related activities. The activities, loosely-articulated to permit either random selection or sequential use, consist of procedures for the teacher and directions and questions for the students *(in italics)*. The first page of each unit is illustrated with a logo or logos characterizing its content emphasis, as indicated in the Contents on pages *vii-viii*. In addition to the references found at the end of most units, a comprehensive, general bibliography is provided, beginning on page 155. The Appendix contains lists of concepts and understandings relating to the Olympics. You may wish to fashion some of these items into simple pre- and posttests for evaluating student awareness and understandings.

In conclusion, it should be pointed out that the principle of infusion, that is, the use of the subject area cognitive and affective base, salted with ideas and understandings about the Olympics, precludes the necessity of a major effort to become familiar with a new content area. A familiarity with some general information and understandings about the Olympics (including that provided in the publication as well as information readily available from some of the more common references cited) will sufficiently enhance your own proven teaching ability and the topics you teach. As a result, the use of these units should be an enlightening and interesting experience for your and your students.

BACKGROUND — THE ANCIENT OLYMPIC GAMES

The original evidence about sport and games in the ancient world is fragmentary and widely scattered. Some of it is literary, some archeological and epigraphical. It is clear only that our view is, at best, unclear. As Washington Irving once wrote:

> *"History fades into fable, fact becomes clouded with doubt and controversy; the inscription moulders from the tablet; the statue falls from the pedestal."*

The Greek passion for competitive games is lost in prehistory. Homer's Iliad is the earliest reference to such competition. In the Iliad, Achilles organized games to accompany the burial rites of his comrade Patroclus, who was killed by Hector before the gates of Troy. The events included a two-horse chariot race, a footrace, boxing, wrestling, and weight-throwing. The prizes were expensive treasures such as bronze cauldrons, horses, and captive women.

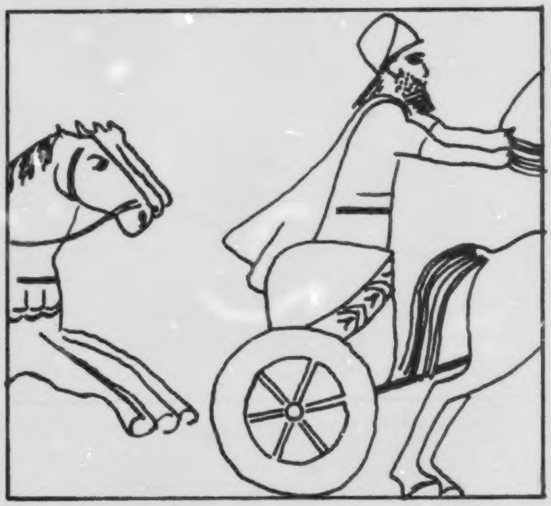
Combining worship and games held no inconsistency. One respected the gods, feared them, and acknowledged dependence on them and gratitude to them, but one rarely loved them or humbled himself. Success might be aided by the gods or inhibited by them, but application, hard work, and self-reliance were keys, and from them came pride and personal achievement. Nonetheless, the gods and the games are intertwined. Greek mythology credits the creation of the games to Heracles, better known as Hercules who, as a penance for his misdeeds, was given the task of cleaning out the Augean stables in a single day. Augeus, the king, promised Heracles one third of his herd should he accomplish the task. This Heracles did by diverting the Alpheus and Penius Rivers to flow through the stable, thereby cleansing them. Augeus refused to pay, Heracles slew him, seized all his herds, and instituted the Olympic Games in celebration of what he considered a fine day's work. The likelihood is that the games gradually developed out of the custom of common sacrifice by neighboring communities. Olympia, the site of the ancient Greek games, lies on the banks of the Alpheus River of Heraclean fame. It is documented that, at a time prior to the beginning of the first games, the priests of Elis, the province in which Olympia was located, laid their sacrifices and fruits upon the altar and stacked faggots around it for a pyre. A crowd of chosen boys waited at the ready some 200 yards distant from the altar. Then at a sign, they all raced toward the altar and the first to reach it was allowed to take the flaming torch from the priest's hand to light the sacrifice. Such were the plain, rustic, and pious beginnings of the Olympic footrace and all other games.

That race of approximately 200 meters became the sole athletic event of the first Olympiad beginning in 776 BC. The dash was the length of the stadium and it was to determine the length of the runs in future Olympic Games with additional races becoming multiples of a term of measure called the *stadion*. However, changes in the Olympics were to come very slowly with the 200-meter dash or *stadion* run being the only athletic contest in the first 13 Olympiads. The contestants were local men of Elis, Messina, and

Pisa, come to honor the gods. Next, the Spartans were invited as they were in alliance with the Elians. The festival of one province was growing into the festival of the whole of Peloponnesia. The Spartans, with their emphasis on ascetic virtues, were outstanding athletes and they dominated the early games. As the Games became more prestigious, they began to include more and more of the Greek world. The first Athenian to win a contest appears in the Twenty-First games and the first overseas Greek, a citizen of Smyrna in Asia Minor, in the Twenty-Third. By then, all the cities, colonies, and clans of the entire Greek world were taking part. New events were introduced.

In the spring of an Olympic year, three sacred heralds set out from Olympia to visit every corner of Greece, proclaiming the forthcoming games. The date was fixed by a complicated religious calendar, so that the third day of the games always coincided with either the second or third full moon after the summer solstice. The athletes were required to travel to Elis one month in advance to train under the supervision of specially selected judges. Others, by the tens of thousands, came when they chose; spectators, food and drink purveyors, official representatives of many Greek cities, and touts and gamblers. A first century A.D. picture of the fringe at the Isthmian Games as seen by Diogenes may give some idea of the reality:

> *"Many miserable sophists could be heard shouting and reviling each other round the temple of Poseidon while their so-called pupils fought with one another. Writers were reading their rubbish aloud. Many poets were reciting their verses to the applause of others, many conjurers were showing off their tricks, fortune tellers theirs. There were countless advocates perverting the law and not a few pedlars hawking everything and anything."*



At Olympia the chariot race was the opening event, but only after an initial day of preparation and worship. The two-wheeled chariots, each drawn by four horses abreast, entered the Hippodrome in a procession headed by the purple-robed judges, a herald, and a trumpeter. As the competitors passed the judges' stand, the herald called out the names of the owner, his father, and his city. Then he proclaimed the games officially opened. We do not know the exact size of the field for any of the games' chariot races. We do know that 41 were reported at the Pythian Games in 462 BC. This large field made for an interesting contest, since they all started together and rushed for a turning post some 400 meters away. The trumpeter would signal the beginning and then for 12 laps, more than 9 kilometers, the horses would pull the light carts in bursts of speed interrupted by the 180-degree turns at the post. In the most beautifully and precisely observed description of its kind from all of Greek literature, Homer's account of the funeral games for Patroclus, old Nestor gives his own son the following advice on how to compensate for the known slowness of his horses:

> *"It is by skill that the sea captain holds his rapid ship on its course, though torn by winds, over the blue-wine water; by skill charioteer outpasses charioteer. He who has put all his confidence in his horses and chariot and recklessly makes a turn that is loose one way or another finds his horses drifting out of course and does not control them... You must drive your chariot and horses so as to have this the turning post and yourself, in the strong fabricated chariot, lean over a little to the left of course, and as for your right horse whip him and urge him along, slackening your hands to give him full rein, but make your left hand horse keep hard against this turning post so that the nub edge of your fashioned wheel will seem to be touching it. Yet take care not to brush against it, for, if so, you might damage your horses and break your chariot, and that will be a thing of joy for the others, and a failure for you. So, dear son, drive thoughtfully and be watchful, for if you follow the others but get first by the turning post, there is none who would sprint to make it up, nor close you, nor pass you."*

The Olympic horse race followed the chariot race. The horses were ridden bareback, without stirrups, over a field that had just been torn up by the chariot race. "Horseback riding of a strenuous sort," wrote Galen the Greek physician, in the second century A.D., "has been known to rupture parts in the region of the kidneys, and has often brought injuries to the chest or sometimes to the spermatic passages — to say nothing of the missteps of the horses, because of which riders have often been pitched from their seat and instantly killed." The race itself began, like the chariot race, over a fanned-out line and then back a distance of about 800 meters.

The afternoon of the second day was devoted to the pentathlon which included the discus, standing long jump, javelin, 200-meter sprint, and wrestling. All of the events except the wrestling were contested in the stadium, the wrestling being held in an open area around the altar of Zeus. The number of entrants in the pentathlon was small, and it was not uncommon for some to drop out along the way, while others were eliminated by their performance. Victory was not calculated by points. If anyone was first in three events, that automatically ended the contest. Otherwise, the field was reduced for the final contest, the wrestling, to those competitors who still had a chance to win because of their placement with four completed events.

The third day of the competition coincided with the full moon. The morning again took on religious overtones. Varied religious rites, private and public, were followed in a great procession that began at the magistrate's house and wended its way to the altar of Zeus. The parade included judges, priests, the representatives from the cities, athletes, friends, and trainers. Arriving at the altar they watched the slaying of one hundred oxen. The roasted flesh was removed to the magistrate's house where it was consumed at banquet.

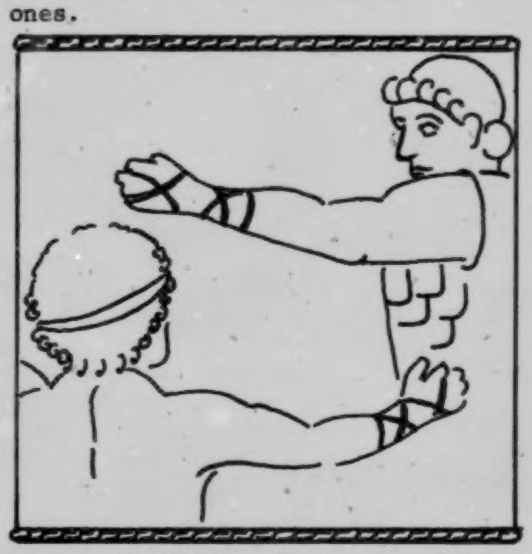
The afternoon was given over to three events for boys, the 200-meter race, wrestling, and boxing. A boy was defined as someone who had reached his twelfth birthday. This rather loose definition in a society without birth certificates created some problems but not enough to warrant a movement to classes of boys, as was done in some other Greek games.

The morning of the final day was occupied with the three running events, 200 meters, 400 meters, and the long distance race of 4800 meters. The 200-meter run was simply a full dash of the stadium, but the longer runs have some unanswered questions left, since we are uncertain if there was one common turning pole in the 400 meters or separate turning poles for each competitor. There were rules against tripping and bumping, but ancient writers imply that such tricks were frequent.

Finally, on the last afternoon came the tough but popular body contact sports; boxing, wrestling, and pankration. The procedure was simple; lots were drawn from a silver urn setting up a draw and a flight that would lead to the final bouts. All three sports were brutal, with few rules, no time limits, and no ring. There were also no weight classes so that competition was limited to big, tough, well-muscled men.

The aim in wrestling was to score three falls, a fall being defined as touching the ground with the knees. Milo of Croton, a legendary strong man from a legendary village, won the boys' wrestling in 540 BC and the senior event at five successive games. Presumably, biting, or gouging was prohibited, but not much else was. A fifth century B.C. wrestler named Leonticus, from Messina in Sicily, tried to break his opponent's fingers as quickly as possible. He was remembered as one of the first wrestlers to develop new holds beyond the conventional ones.

Boxing, however, was far more brutal than wrestling. Leather thongs were wound tightly around the hands and wrists, leaving the fingers free. Blows were allowed with fist and hand. The two contestants fought on without a break until one or the other was knocked out or raised his hand as a sign of defeat. Blood was what attracted the spectators and blood was what they received. The classic, ancient dream book by Artemidorus of Ephesus explained that "to dream of boxing is bad luck for everyone except those who handle blood in order to earn a living, namely, doctors, priests, and cooks."



The final pugilistic event in the afternoon of the fourth day was the pankration, a combination of wrestling and judo, with a bit of boxing thrown in. The contestants punched, slapped, kicked, wrestled, and, though illegal, would bite and gouge each other until one surrendered by tapping the victor on the back or shoulder. There is one story told of the Arcadian pankratist who was in search of his third Olympic victory. His unnamed opponent held him with his legs in a scissors grip while throttling him with his hands. Arrochian, the Arcadian, broke one of the man's toes but also died by strangulation even while his opponent gave in from the pain in his toe. The Elians crowned the dead body of Arrochian with the wreath and proclaimed him the winner.

One more event remained before the competition was closed, the 400-meter race in armor. Some writers say that it was held last to mark the end of the truce that was struck for each of the games. The simpler and more plausible explanation is that it was felt desirable to reflect in the games the fact that the infantry had supplanted the cavalry as the main Greek military arm.

The games as described above evolved slowly over a period of 250 years and their format remained essentially unchanged with minor exception for the next 950 years. The Olympics were indeed bound by tradition and governed conservatively. One example of Olympic conservatism is noteworthy. Women had traditionally been restricted to contests of their own during special festivals held at times other than the period of the great games. At Olympia, for example, there was one in honour of Zeus' consort Hera, which included a sprint for girls over a distance of about 160 meters. However, toward the end of the pre-Christian era, increasing emancipation of women, especially in the cities, led to the introduction of short distance races for girls in many of the games, including the three other games of the Circuit. Olympia resisted as usual, just as it held out against the admission of women as spectators. There is a splendid contemporary tale of this. In 404 B.C.,a widow, who came from a great sporting family of wealthy Rhodian exiles, wished to see her son box in the boys' events at the Olympic Games. She went disguised as a trainer, but in her excitement when the boy won she leaped over the barrier behind which the trainers were stationed and exposed herself. The judges let her off without penalty "out of respect for her father and her brothers and her son," all of whom were Olympic winners, but a rule was immediately introduced requiring trainers henceforth to attend the contests as naked as the participants.

The Olympic Games gained strength from their conservatism and their stability. They stood at the apex from the beginning of games of every kind in Greece and remained there for over a thousand years, impervious to popular fashion, to complicated political and cultural changes, to imperial whim, to the challenge of every competing attention, old or new. Their high moral and religious nature overwhelmed the blood and the brutality. It was only when the influence of the politicians and the wealthy was permitted to make itself felt that corruption crept in and the athletes began to think not of the olive wreath but of the cash prizes to be had. The authentic popular character of the contests was steadily eroded by increasing professionalism. The decline of the games was nevertheless a slow one. Only in the year A.D. 393 do we come to the official end of the unbroken series. Although the Christian ruler Theodosius I had banned the games, they continued to be held until the ban was finally reissued and enforced by Justinian I in A.D. 529. It was at this point that Greek civilization in its classical form came to a definite end. The destruction of Olympia began with human hands as looters took their toll of monuments and buildings. An earthquake further decimated the buildings and the muddy waters of the Alpheus and Cladeus soon buried the last vestiges of the games under a layer of silt.

The first Olympic champion was Koroibos, a cook from Elis. The last was a foreigner, Varazdates, a member of the royal family of Armenia. And so the games symbolized their natural evolution from the parochial to the universal — which is the point at which the modern Olympiads take up the Olympic ideal again.

The Modern Games

There is nothing obscure about the origin of the modern Olympic Games. They owe their life to a French educator, an untiring reformer and the author of 36 books. The world remembers Pierre de Ferdi, Baron de Coubertin as the reviver of the games, and as such he received the 1920 Nobel Peace Prize. But he had other interests. He was actively interested in the reform of education in which the Olympic ideal played only a small though significant part.

Coubertin was convinced of the importance of regulated physical activity for a perfect education of human beings. His interest in sports grew out of the defeat that France suffered in the Franco-Prussian War. He believed that the French educational system contributed to the defeat by not being rigorous and physically demanding. He saw the British model as produced at Eton as being the ideal. He pursued this theme in France with little success and finally turned to international competition as a means of affecting the education of French and the world's children. He was inspired by the prospect of bringing together the sportsmen of the world to compete on friendly and equal terms, forgetting national rivalries and differences of any kind whatever. He believed that in this way every separate system and tradition of education would be brought into fruitful contact and that people would learn the best from each other.

As a framework for such a meeting he thought of a revived Olympic festival. Coubertin wrote a memorandum on the subject and sent it to the world's leading sportsmen and rulers and it met with instant success. Two years later the first Olympiad of modern times was inaugurated, in Athens, the capital city of Greece, in 1896.

The rest is recorded, well-documented history, to which you may readily refer as appropriate while using the classroom units which comprise this manual.

k-3

THE MASTER MUSCLE K-2

OBJECTIVES...to learn about the body...to encourage good health practices...to stimulate interest in physical fitness and active sports...

ACTIVITY...1...Ask children to find pictures of athletes engaged in active sports and display them on the bulletin board.

- *Label the sports activities: e.g., Running, Throwing, Skating, Swimming.*
- *Have any of you tried the sports shown in the pictures? Which ones?*
- *What can you tell the others about the sport?*
- *What must you do to become very good at that sport?*
- *Are any of these sports played as "team" activities?*
- *What are "teams?"*
- *How do you think a sport is different when it is played as a team sport?*

Name some sports that you have seen older children and adults play and tell whether they are the kind which need cooperation among team members or which need only individual effort for success.

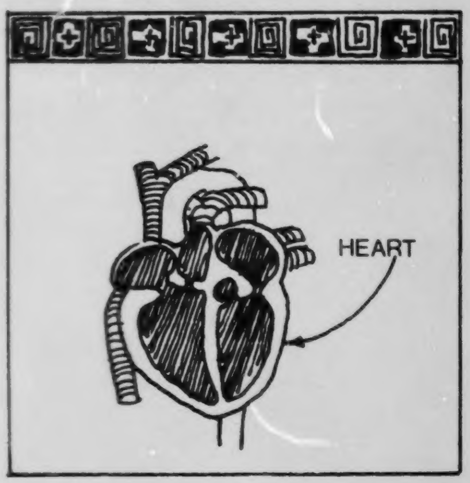
ACTIVITY...2...View the film, Our Wonderful Body: How We Keep Fit. The film shows athletes in training, and teaches the need for exercise, good nutrition, and rest.

Ask a boy and girl from the high school track teams to speak to the class, describing the activities included in track and the training regimen needed. Show pictures or slides of track members participating in a local meet.

Read or tell stories of great athletes — Bob Mathias, Rafer Johnson, Jesse Owens, Babe Didrikson Zaharias, Wilma Rudolph, for example. Biographies emphasize the dedicated training needed to become an athlete.

ACTIVITY...3...Discuss with the children their own growth and progress in a physical education or playtime activity — running, jumping, pull-ups. (The physical education teacher may be able to share records or simple observations concerning the growth in ability of each child.) Point out that muscles were strengthened through growth and exercise. Muscles became stronger as they were used, and then proficiency developed.

Bring in some cardboard tubes and, if possible, a stethoscope. Explain to the children some of the characteristics of the heart. Examine with them the diagrams of the body, especially the heart, which may be found in the encyclopedia.



Use the cardboard tubes (or stethoscope) and listen for your hearbeat.

- *How big is the heart? What does it look like?* (a valentine?)
- *Does it rest at night? Does it ever stop working during life?*
- *Why could the heart be called the "Master Muscle?"* (All the other muscles depend on the heart to bring them blood, carry oxygen and digested food, and carry away wastes.)
- *How can the heart be kept healthy and strong?*

*ACTIVITY...4...*Read Let's-Try-It-Out...About Your Heart by Seymour Simon. Try the activities suggested and make discoveries together. Simulate the pumping action of the heart by cupping hands and rhythmically squeezing together and opening under water.

Discuss briefly the composition of the blood — plasma, the liquid part, which carries digested foods and wastes — red blood cells, which carry oxygen — white blood cells, which fight infection. Learn about the "pipes" that carry the blood, the blood vessels: arteries, veins, and capillaries. (The children will enjoy learning some details. Active listening on the teacher's part is needed to prevent misconceptions and to allay fears.)

Show children how to find a pulse in the wrist, temple, ankle, under the chin, and under the arm. Try to count the pulse for 30 seconds. Double to determine heartbeats/minute.

- *Is everyone's pulse the same?*

Have some students ask their parents' assistance in determining pulse rate of baby brother or sister, and report to class.

Exercise vigorously. Take your pulse again.

- *How is the rate affected?*
- *Does increased hearbeat due to exercise harm the heart?* (Sensible exercise helps the heart to stay strong and healthy, just as regular exercise helps other muscles.)

Ask the school nurse to vist. Study a model of the heart. Discuss the role of exercise in maintaining good health. Contact the local chapter of the American Heart Association for materials which might be available for this session.

Ask the children to suggest important words needed to write on the topic, "A Healthy Heart." List words on the chalkboard directing discussion to clarify concepts. Ask children to use those words they wish to write about to show what they have learned. (See samples below.)

The Heart

The pulse is your Heart beat. If you run it gose fast if you walk it gose slowe. It is as big as my fist. It never gose to sleep if it dos you will die. The Heart will anuley go to sleep wen you die.

Roy 11/14/78.

The Heart

The redcells carry oxygen. My heart is as big as My fist. My heart never Stops beating When I go to bed only if I die. The white cells Kill germs. blood goes all Through your body.

AdaM 11/14/78

Debbie 11/14/78

The Heart

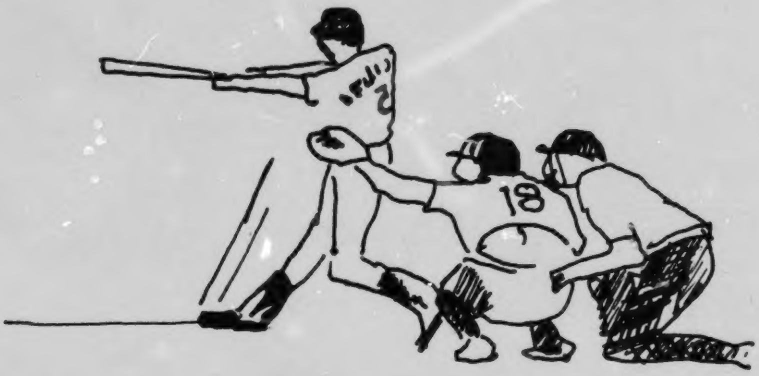
Your heartbeat is just like your pulse. Your heartbeats about seventy to ninety times a minute. Exercise will make you healthy. White blood cells fight disease. If you cut your artery you might die. You could take a cardboard tube and put it on someone elses heart and hear it beat.

The Heart. jean. 11/14/78

You have to get plenty of exercise to Stay heathy. If you breke an artery you mite die. If you get cut the white blood cells will fight the infection. The heart pumps blood to your body.

ACTIVITY...5...Talk about alternatives to watching television as a pastime.

Tell (write short) stories describing your favorite, active games. (e.g., Frisbee, jump rope, climbing, dancing, ball games)



Draw pictures of the games you have described. Add them to the bulletin board display (from Activity 1).

Jump rope is familiar fun, and provides excellent exercise. Set aside some time and space and the class will quickly become enthusiastic. Learn some tricky jumps. Collect jump rope rhymes from other times and places. Peter Skolnik's delightful little book will suggest many activities. (See below.)

Many adults today are interested in, and enthusiastic about, fitness programs. Invite community members to discuss, demonstrate, and instruct the children in their specialties. Yoga, aerobic dancing, jogging, and cross-country skiing might be considered.

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SNOW AND ICE K-2

OBJECTIVES...to learn about the characteristics of snow...to develop an awareness of the Winter Olympics...to stimulate interest in winter activities outdoors...

ACTIVITY...1...Letter signs for the Winter Olympic events listed on page 28. Decorate them with facsimiles of the sports logos pictured on the same page. Use these labels as bulletin board organizers. Ask the children to bring in any pictures, news articles, or other information they can find on these sports. Share and discuss.

Invite community athletes, school team members, and coaches to talk to the class concerning their special winter sport.

- *What is the history of the sport?* (See Ruth Kirk's book for adults, Snow, for fascinating information on the history of skiing and snowshoeing.)
- *How did the sport develop?*
- *What kind of equipment is needed?*
- *How is it used and cared for?*
- *What kind of practice and training is needed to become skilled?*
- *Who are some important athletes in the sport today?*
- *What are their stories?*
- *How does one get started in the sport?*
- *What makes it a special kind of fun and challenge?*

ACTIVITY...2...Visit a cross-country ski center. Learn how waxes can solve the problem of going uphill and downhill in varying snow conditions. Invite parents to conduct small groups and take a short tour.

ACTIVITY...3...View the film, Snow: A First Film.

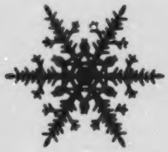
Read Snow is Falling by Franklin M. Branley or A Walk in the Snow by Phyllis Busch. Both books suggest many activities for a snowy day.

Take the class outside when snow is falling. Study snowflake shapes with magnifying classes. A strip of black velvet pinned to the sleeve will ease viewing. Note the six sides of a perfect flake.

Show photographs taken by W. A. Bentley and reproduced in his book, Snow Crystals.

*ACTIVITY...4...*Use as a penmanship/printing lesson the following quote from Henry David Thoreau's Journal:

> "As surely as the petals of a flower are fixed, each of these countless snow stars comes whirling to earth, pronouncing thus, with emphasis, the number six."



Fold and cut paper snowflakes, and display with the writing specimens.

Take a walk after a new snow.

- *Why does it seem so bright?* (Snow crystals act as tiny mirrors, reflecting light.)
- *Can you tell wind direction during a storm?* (Look for drifts against trees and fences.)

*ACTIVITY...5...*When snow covers the ground, it is usually warmer under the snow than above. Prove this statement using two thermometers. Bury one in the snow. Hang the other on a tree. An hour later, read the thermometers.

- *Which spot is colder?*

The snow protects plants and animals from cold. As snowflakes fall and points interlock, air is trapped to form a fluffy, insulating blanket. This snow blanket keeps the earth from freezing as deeply as it would if the earth were bare.

- *Why would a snow house be warm?* (Body heat or heat from a small oil lamp is trapped within, bringing temperature well above freezing.)

*ACTIVITY...6...*Is the snow wet and heavy, or dry and fluffy? Collect a cup of snow and allow it to melt inside.

- *How much water remains?* (about 1" of water from 10" of dry snow)

Try again after a different type of snowfall. Try after the snow is "old."

- *What kind of snow is best for making snowballs and snowmen?*
- *Are snowballs easily made on very cold days?*

- *How is the movement of skis and sleds affected by the type of snow?*
- *How do waxes help in adapting to different kinds of snow?*
- *What is corn snow?*

Filter the melted water from the experiment above through a white cloth or paper towel.

- *Do you see any dirt?*
- *Where did it come from?*
- *Why does white, fresh, snow become dark and grey?*

ACTIVITY...7...Take another walk a day or two after a snowfall. Note patterns of melting. Look at houses to see where heat escapes or where the sun is reflected, influencing melting. Find where snow has melted under a leaf and the leaf has settled.

- *Why does this happen?*

Find out by cutting similar sized pieces of cardboard or wood of varying darkness in color. On a sunny, calm day, place the pieces on the surface of the snow. Check after a few hours.

- *Which pieces sink the lowest?* (Dark objects absorb more heat than light ones.)

Look for demonstrations of this phenomenon in nature: melting under twigs and around the bases of trees.

Find some icicles and discuss how they form and grow. (Melting snow drips downward and freezes.)

Measure the largest icicle you can find.

ACTIVITY...8...Fill two plastic pill vials with water; cap one tightly, and leave the other uncapped. Leave the vials outside to freeze.

- *What happens?* (The water in the capped vial freezes and the capped vial breaks.)
- *Why does one vial break?* (The water in the capped vial cannot expand when freezing without breaking the vial.)
- *How does water freezing in rock cracks help to form soil?*

ACTIVITY...9...Notice how snow changes the appearance of our environment. Encourage children to use imagination when viewing snow-covered trees, cars, or fenceposts. Write stories about impressions.

ACTIVITY...10...Enjoy Snow Stumpers, an intriguing and thought-provoking book by David Webster.

ACTIVITY...11...Studying tracks will help children learn to visualize past events. The tracks are evidence of activities not seen. Have a tracking session on the playground. Have students run, hop, somersault, and walk backward in the snow, unseen by classmates.

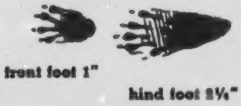
- *Can you read the story in the snow?*

- *Measure the strides and guess the identity of the snow-walker.*

Take coffee cans, blocks, and toys outside and make prints for others to view and discuss. Notice the different possibilities in printing. (Use the top of the can, roll it on its side, etc.)

Follow up this exercise with an art lesson back in the classroom. Use vegetables, erasers, and objects in the room to demonstrate block printing and stamping.

ACTIVITY...12...Take a walk on a nature trail to study signs in the snow. Look for mammal tracks, mice tunnels, bird tracks, and other designs in the snow caused by wind-blown vegetation. Find seeds which have fallen on top of the snow.



GREY SQUIRREL

Snow makes a warm safe home for many animals. Mice tunnel underneath. They can feed here, safe from predators. If snow becomes extremely deep, some animals may have trouble moving about. Deer may starve.

- *What happens when snow melts in spring?* (It soaks into the ground or flows into streams to become part of the water table.)

- *Why is snowfall important to farmers?*

- *If a great deal of snow melts very quickly, perhaps with additional rain, what can happen?*

Blizzards and ice storms make it difficult for people to move about. Visit the town garage to see snow removal and sanding equipment. Read Katy and the Big Snow, by Virginia Lee Burton.

Think about ways to travel in the snow. (skis, snowshoes, dogsled, snowmobile)

ACTIVITY...13...Sometimes ski centers do not have enough snow. Ask an operator to visit the class to show pictures of snowmaking equipment, and to explain how the machines work. The snowmaking process was discovered accidentally by a company which produced machines for spraying warm, water-vapor clouds on citrus groves to keep fruit from freezing. During experimentation, a machine was left operating outside on a winter day and the result was snow.

Snowmaking machines require a great deal of water and cold temperatures to produce the desired results.

How is snow made in nature?

Make snow pictures. Use torn white paper, cotton, or table salt and glue to give a wintry effect.

*ACTIVITY...14...*Plan a winter Olympics afternoon. Have the children make many medals and certificates of participation as an art project.

- Try snowshoes and cross-country skiing. Have fun with toboggans and snow saucers.
- Try the Indian game of snow snake, in which a long polished stick is slid for distance along a groove in the snow.
- Stamp out patterns in snow for circle games, such as "Fox and Geese."
- Have a snow sculpture contest.
- Invent a "biathlon," setting up a course using targets and snowballs in an area away from other play.
- See who can roll the biggest snowball.

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K-2

OLD GAMES—NEW GAMES

OBJECTIVES...to learn about the cultures of other lands, as expressed through play...to become familiar with the history of the Olympic Games...to encourage friendship among peoples of the world...to develop feelings of sportsmanship and fair play...to encourage safety in play...

NOTE...It will be necessary to adapt the instructions for some of the activities to match the abilities and skills possessed by the younger children. For example, the teacher may play a larger role in carrying out the activity, or children may tell rather than write, etc.

ACTIVITY...1...Using a globe, identify the continents for the children and point out the location of Europe relative to North America. Refer to the outline map of Europe on the following page and prepare desk maps from it for the children to use. Call their attention to a large wall map of Europe.

> *Find the names of the countries of Europe on the wall map and write them on your desk maps.*
>
> *Locate Greece and label it on your map.*

Display a large map of Greece and locate Athens and Olympia for the class. If any of the children are of Greek origin and have visited Greece; or, if any one in the community has, invite that person to speak to the class about Greece.

ACTIVITY...2...Read about the ancient Olympics as described in the INTRODUCTION to this publication or in one of the References listed for this unit. Summarize for the class this story of the ancient Olympics, a festival dedicated to Zeus, king of the gods. Glubok and Tamarin's book, Olympic Games in Ancient Greece, describes the contests. (See References, p. 24 .) Share with the class the photographs in the book which depict Greek athletes of long ago.

Show the film, The Ancient Games, in which former Olympians Bill Toomey and Rafer Johnson compete in a simulation of an ancient pentathlon. (See References, p. 24 .)

- *What games were played (contested) in the ancient Olympics?*
- *Are some of these still played today?*
- *What prizes were given back in 776 B.C. during the first Olympics?*
- *Why was a truce, or time of peace, declared?*

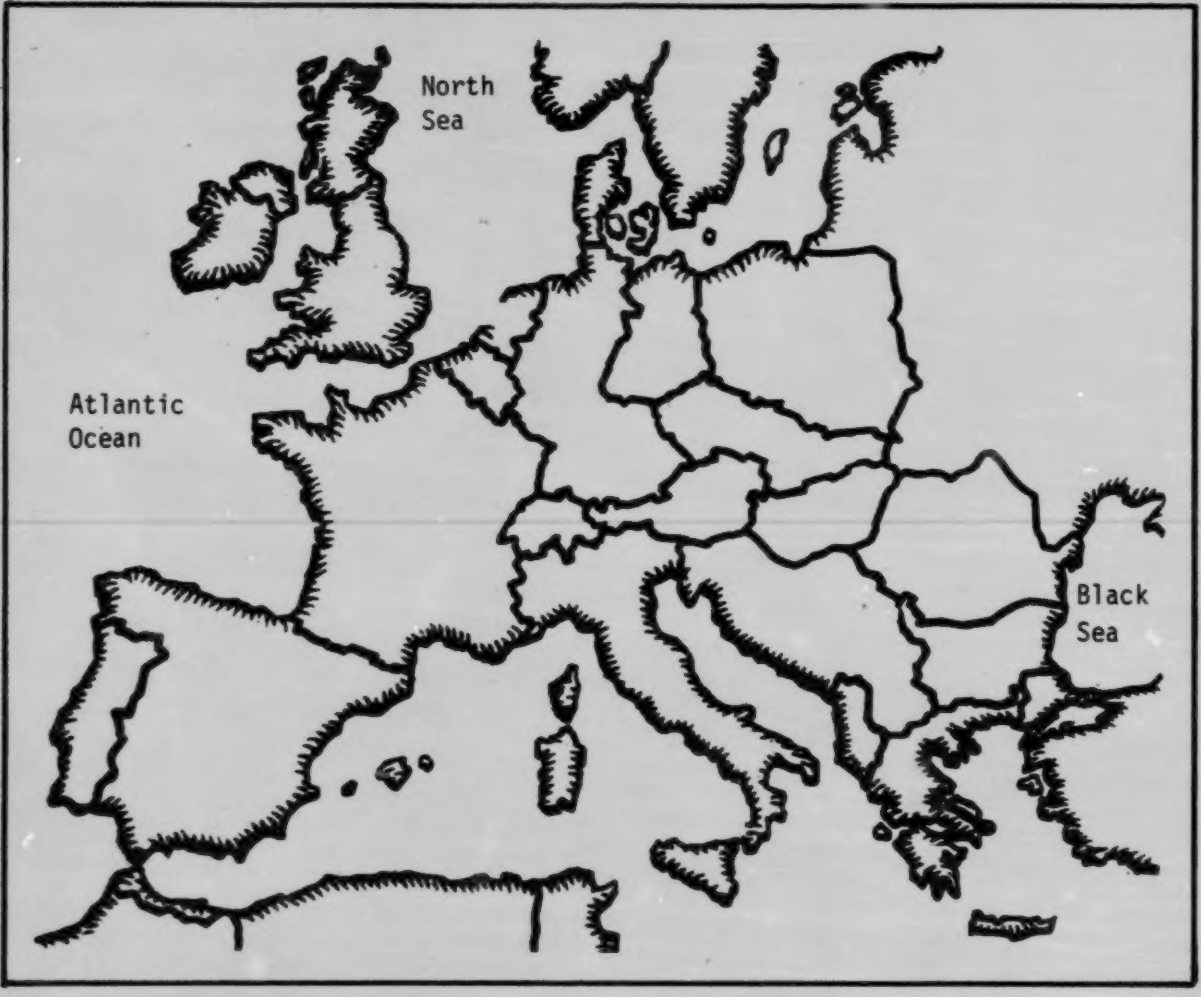
Study with the class a print or slide of Peter Brueghel the Elder's (1525-1569) painting, "Children's Games." Dozens of men, women, and children are shown enjoying themselves in amusements of the period.

- *How long ago was the picture painted?*

- *Do we play similar games today? What are they?*

Ask the children to consider their own favorite games. Think about formal games and general play, both part of growing and learning in every culture.

Write a story entitled, "My Favorite Game." Draw some pictures showing how it is played.

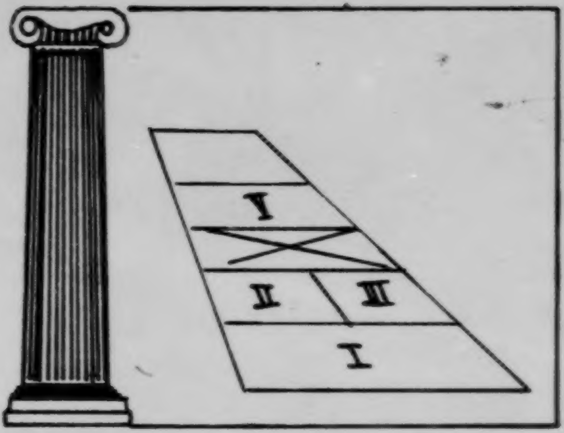


*ACTIVITY...3...*Learn about the toys and games of pioneer and Colonial American children. Visit a collection of antique toys, or arrange to have some demonstrated in class. Try making a cornhusk doll, apple doll, bottle doll, or rag doll. Read Hitty, Her First Hundred Years by Rachel Field (p. 24).

A buzz saw or spinner — an oscillating disk centered on a string loop — is easy to make, as is a ball and cup game of skill. See Bicentennial Games 'n Fun Handbook, by Strobell (p. 24). Try rolling a hoop, play leapfrog, marbles, charades, and tangrams (puzzles with seven pieces cut from squares).

*ACTIVITY...4...*Investigate children's games around the world. (See picture set, Children At Play Around the World, Friendship Press [p. 24]). Find each country on the map and learn about its culture. A number of countries could be covered, or just one area might be studied in depth. As a school-wide project, each class might choose to learn about a different country and teach other children the games, folk songs, and festival days. The books by Nina Millen and Marguerite Ickis and the American Friends Service Committee booklet by Mary Esther McWhirter (p. 24) contains rules, equipment needed, recommended age, and interesting notes for games from many areas of the world.

- *How does each game tell something about the way people live?*
- *How do these games help children learn skills needed in adult life?*
- *Are some games found again and again throughout the world?* (Hopscotch, for example, dates back to antiquity. McWhirter describes variations played in Burma, China, England, Lebanon, Norway, Russia, and Viet Nam.)



Make a list of the games you have discussed which are found in several parts of the world. Using colored thumbtacks, establish a color key for the list of games. Display a map of the world on the bulletin board.

Next to each game, list the countries in which it is a popular pastime (from our discussion).

Locate the countries listed for each game and mark them on the map with the colored thumbtack according to the key.

*ACTIVITY...5...*Learning a new game develops listening skills as rules are explained and recalled in correct sequence during play. Teaching a game to others is an excellent exercise in thinking and speaking clearly. List several simple, familiar games for the class.

Pick one game from the list and write out instructions for play.

- *What will a learner want to know?* (name of game; object of game; determining winners and losers; make-up of teams; simple rules for play)

Try out the game, following the directions exactly.

- *What improvements are needed?*

Talk about the children's experiences in winning and losing. Discuss what good sportsmanship is in both situations. View the film, Beginning Responsibility: Being a Good Sport.

Write a brief story entitled, "I Won" or, "I Lost."

*ACTIVITY...6...*Copy the Olympic motto: CITIUS, ALTIUS, FORTIUS (swifter, higher, stronger). We support our team and enjoy a sport when trying our best. But not everyone can be a winner. Discuss the Olympic Creed:

> The most important thing in the Olympic Games is not to win but to take part, just as the most important thing in life is not the triumph but the struggle. The essential thing is not to have conquered but to have fought well.
>
> Baron Pierre de Coubertin

Olympic athletes promise to respect and obey the rules of the games.

- *What would games be like without rules?*

All of us have experienced having a game ruined by arguments because rules were not understood or observed. Discuss how this can be avoided.

- *What are some ways for deciding who goes first and for choosing teams?* (coin flip; guessing numbers; drawing straws; throwing dice)
- *What do we call people who do not play, but who keep the game going fairly and smoothly?*
- *What are some things we can do to keep play fun and fair at home and at school?*

ALEXANDER THE GREAT WITH AMUN HORNS—FOUR DRACHMA SILVER COIN—300 BC

View and discuss the film, The Game, which is about fair play during a baseball game.

*ACTIVITY...7...*Some rules are intended to keep a game fair while other rules are for the purpose of insuring safety. Invite the school nurse/teacher to visit the class to discuss safety rules on the playground. Two films on playground safety are listed on page 24 .

Many sports require carefully selected equipment for safety. Ask a Little League coach to discuss safe behavior, proper equipment, and sportsmanship during baseball games.

Learn about bike maintenance and safety in riding. Ask the police to bring a "Talking Bike" if this program is available in your community. The children will enjoy the film, Be Safe, My Friend, featuring Super Sidney and Boomer.

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ACTIVITY...8...Tell the children the story of the revival of the Olympic Games by Baron Pierre de Coubertin, starting with the 1896 Games in Greece. 258 athletes from 13 nations took part. (In 1972, 7,000 athletes from 121 nations participated.) Coubertin hoped that peace would be furthered by the Games through helping people to grow in body and spirit. He hoped the Games would encourage people to develop healthy bodies; to learn about fair play; to develop new interests; to learn to value a sport for its fun; and to encourage friendships among people from many nations.

Ask the children to bring in clippings and news reports about the Olympics. They could be news reporters, keeping the class informed. Compile a class scrapbook. Find pictures of the leading athletes. Watch some events together on television. Read sports reports on events, and ask children to try writing their own articles.

- *Where will the Games be held?*
- *What preparations have been made?*
- *Name some of the countries which are participating.*
- *What sports will be part of the program?*

NEWSPAPER
CLIPPINGS

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OLYMPIC SIGNS AND SYMBOLS

K-2

OBJECTIVES...to understand the use of picture signs and symbols in modern life...to become familiar with symbols used in the Olympic Games...to become familiar with the sporting events of the Olympic Games...to relate these events to games and sports played in school and at home...to increase perceptual awareness...to discover shapes and enlarge and duplicate them...to investigate space and size relationships...to learn to make and use a pattern...

ACTIVITY...1...Display replica signs about the classroom. Materials from the kit Useful Signs to See and Read (Milton Bradley) are large, bright, and clear. Read the signs together, discussing the meaning of each. If possible, obtain a poster illustrating the picture signs now used along the highway. (New York State Department of Transportation)

- *Why might signs using pictures instead of words prove helpful to motorists?*

Read William Dugan's, The Sign Book, a colorful book suitable for and attractive to beginning readers. Enjoy together the more intricate pictures in All Kinds of Signs by Seymour Reit.

View the films Reading Signs is Fun and Playing Safe in Animal Town. (See page 30.) The latter film includes non-verbal, international traffic signs.

ACTIVITY...2...Set out on a sign walk with the class. Have each child take a booklet of blank pages.

Draw pictures of the street, traffic, and store signs you see along the way.

Look for the eagle on the United States Postal Service mailbox.

- *What does it stand for?*

Draw the traffic light and discuss the meaning of the color signals.

Use some of the remaining blank pages for continuing this project at home.

Start a class scrapbook of picture signs and symbols. Include drawings, clippings, and photographs taken by the class using an instant camera.

Look for picture signs inside the school and other buildings. (Rest Rooms, No smoking, Telephone, Handicapped facilities)

ACTIVITY...3...Provide cardboard, construction paper, markers, and crayons. Have each child make a sign. Before starting work consider:

- Purpose of sign
- Importance of legibility
- Use of Color
- Size of lettering
- Shape of sign
- Getting message across with few words or no words at all

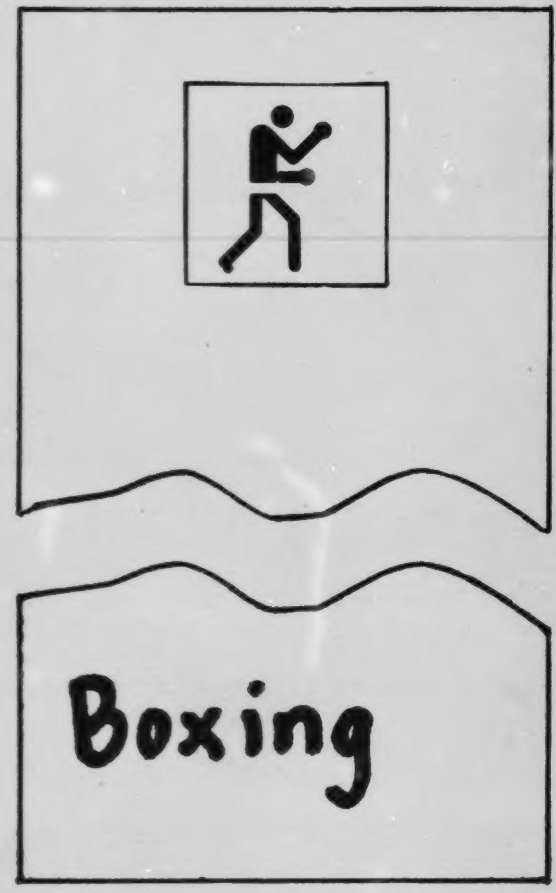
ACTIVITY...4...Discuss the meaning of punctuation marks, math symbols, and music signs. Make charts of each to include in the class collection of signs and symbols. Each symbol helps to get a meaning across quickly and clearly.

Make a colorful mural, including as many holiday symbols as possible.

Discuss the meaning of each of the symbols in the mural.

Ask each child to bring in a highway map. Study the Key, or Legend, and learn about the symbols shown.

ACTIVITY...5...Display several signs, each of which gives the same direction in a different language. (See Picture Signs and Symbols by Winifred and Cecil Lubell.)



Pretend you are visiting the zoo in Greece.

Find the sign that means "To the monkeys."

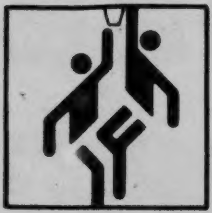
- *How could we make a picture sign for those who do not understand Greek?*
- *Why would picture signs be especially helpful at the Olympic Games?* (The Games are held in a different country every four years. Athletes, reporters, and spectators come from many countries.)

Obtain copies of the Olympic symbols used for the sporting events. Make a bulletin board, matching picture sign and sports word. (See the symbols on pages 27-28.)

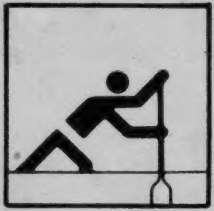
A variety of games can be devised using tagboard cards with Olympic picture signs and sports words. For example, words may be separated from symbols by cutting the card in a wavy or jagged pattern. Use as reading puzzles by matching. Or, make a set of cards so that a symbol on one card and the sport's name on another make a pair. Use a card of the Olympic rings as the extra, and play the game of "Old Maid," with the Olympic rings cardholder the winner.

SUMMER GAMES

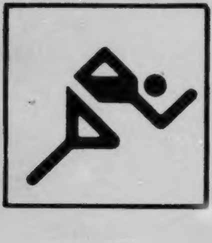
Basketball



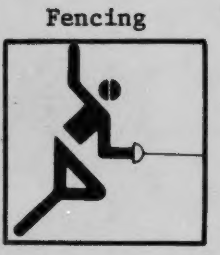
Canoeing



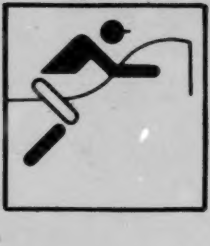
Track & Field



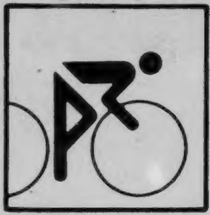
Fencing



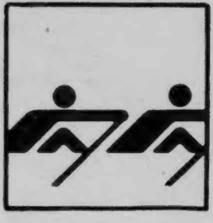
Equestrian Sports



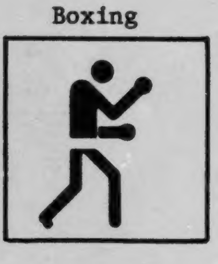
Cycling



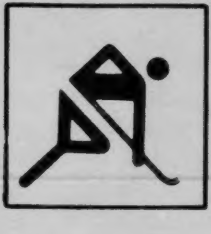
Rowing



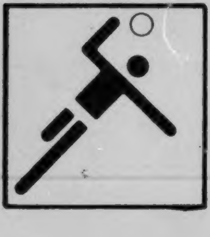
Boxing



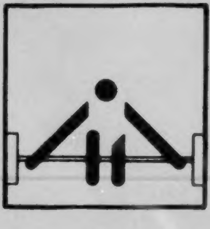
Field Hockey



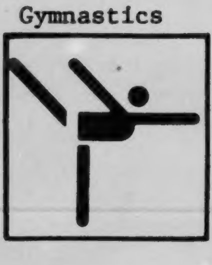
European Handball



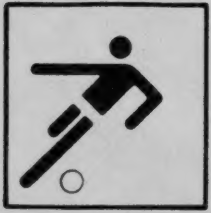
Weightlifting



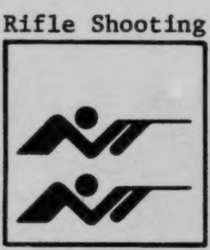
Gymnastics



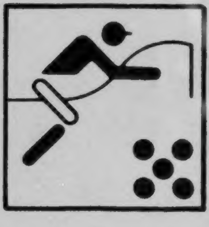
Soccer



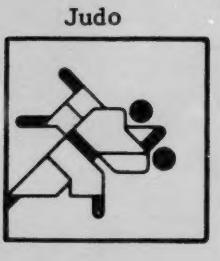
Rifle Shooting



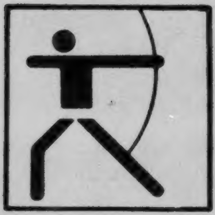
Modern Pentathlon



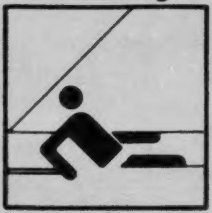
Judo



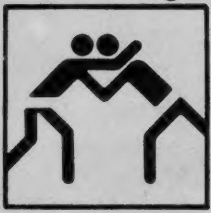
Archery



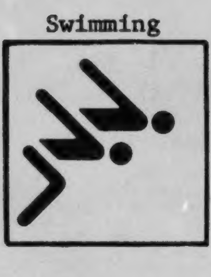
Yachting



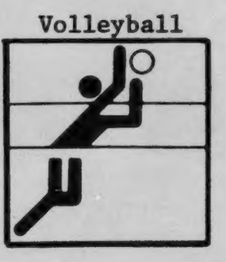
Wrestling



Swimming

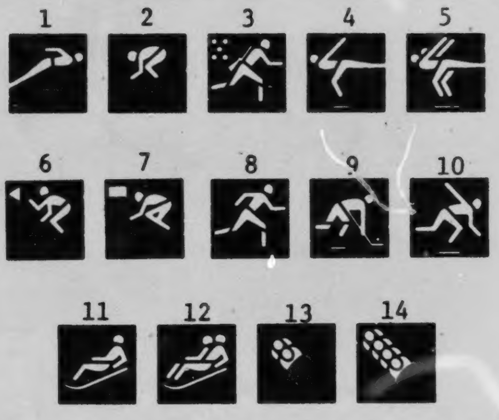


Volleyball



WINTER GAMES

1. Ski Jumping
2. Downhill Skiing
3. Biathlon
4. Figure Skating
5. Figure Skating, Pairs
6. Slalom
7. Giant Slalom
8. Nordic Skiing
9. Ice Hockey
10. Speed Skating
11. Luge
12. Luge Doubles
13. Two-man Bobsledding
14. Four-man Bobsledding



*ACTIVITY...6...*Once the children have had an opportunity to note the match-ups of picture sign and sports word (See Activity...5..., p. 26.), provide them with desk copies of the sheet of Summer Games symbols on page 27 (and the Winter Games symbols above, if you wish). Using references such as James Coote's A Picture History of the Olympics, provide the class with photographs of the sports which thus far have been represented by symbols. Assess their familiarity with each of the sports depicted by having them check appropriate responses on a chart similar to the one below.

SPORT	PLAYED (same or similar sport/game)	WATCHED (in person)	WATCHED (on TV or in movies)	? (have never seen)
Basketball	✓	✓	✓	
Canoeing			✓	
Track and Field	✓	✓	✓	
Fencing				✓
Equestrian Sports				✓
Cycling	✓	✓		
Rowing	✓			
Boxing			✓	
Field Hockey				✓
European Handball				✓
Weightlifting		✓		
Gymnastics	✓	✓	✓	
Soccer				
Rifle Shooting			✓	
Modern Pentathlon				✓
Judo				✓
Yachting			✓	

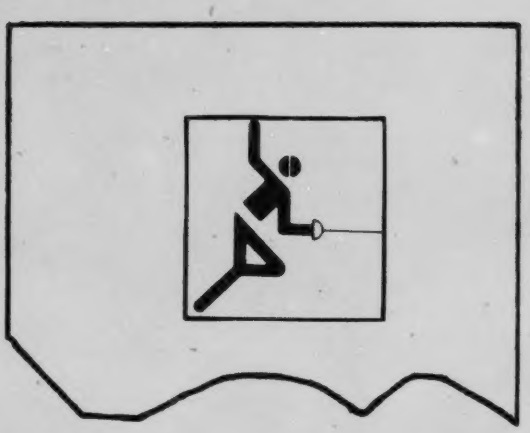
*ACTIVITY...7...*The goal for the ensuing project is to have each child duplicate, in larger size, one of the sports symbols, using contrasting colors of construction paper. (See the sample on page 30.)

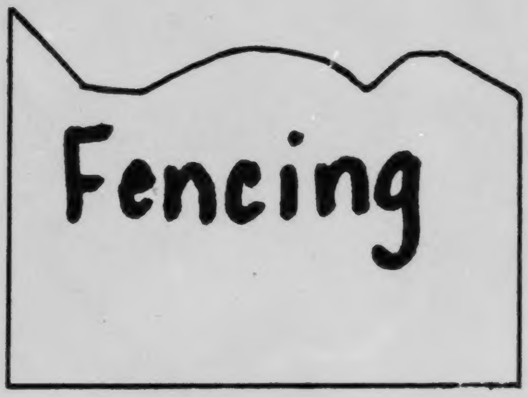
Give each child a card bearing an Olympic sports symbol and the name of the sport represented. (Use the cards made for the reading puzzle in Activity 5, or have each child cut out a symbol from the sheet of symbols and paste onto a plain 3" x 5" index card. Actually the children may make any number of cards this way [limited only by your supply of index cards!] for trading, matching pairs, and other games.)

Have the children count the number of separate shapes shown in the selected symbol. Demonstrate on chalkboard. Count heavy black shapes only.

Demonstrate cutting a shape, attempting to duplicate and enlarge. Discuss problems that might arise when all shapes are cut (some pieces too small or large; errors in duplication).

Construction paper is expensive.
How can we avoid waste?





Some children will have seen parents using pattern pieces in sewing. Suggest that less expensive paper, such as newsprint, or used ditto paper could be used to make pattern pieces. Remind the children that they need not expect perfect results at their first attempt with the pattern paper. Have them continue modifying their attempts until they are satisfied.

Begin cutting your pattern pieces. Make several attempts at cutting each pattern piece until you are satisfied that the result is a close but larger copy of the original.

When you have finished making the pattern pieces, study the master symbol carefully. Arrange the pattern pieces on your desk as a copy of the original. Leave spaces, just as in the master.

- Are any adjustments needed?

Choose two sheets of different colored construction paper.

Carefully hold each pattern piece down on one piece of the construction paper and draw around it. Cut.

Place these pieces on the other sheet of construction paper. Study the master again and arrange carefully. (Caution children against gluing before final layout.)

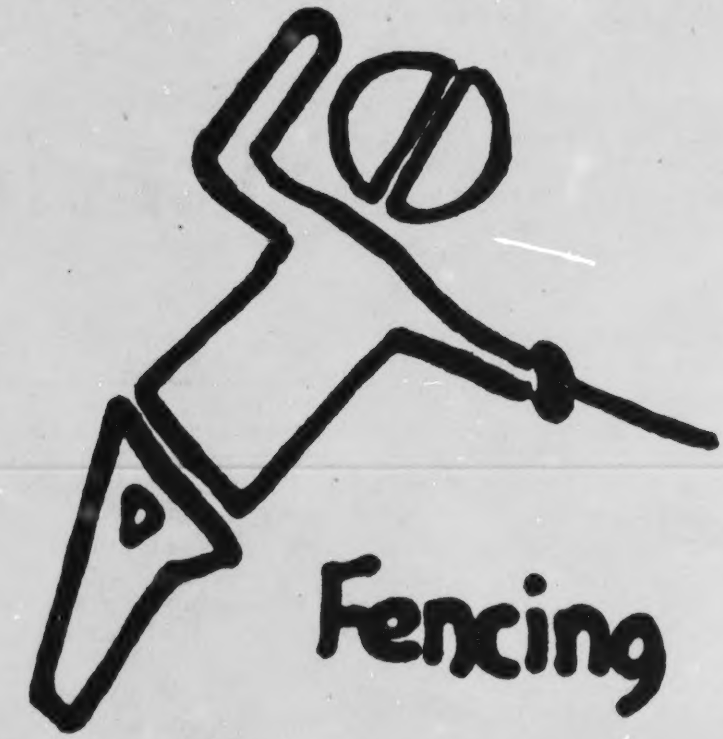
With a pencil or dark crayon, add the lines needed for some symbols (horse, sail, epee, bow, etc.). Do not add faces, hair, etc. (Duplication of a clear sign with a minimum of detail is desired.)

Print clearly the name of the sport represented.

Display your result.

*ACTIVITY...8...*Older children would enjoy creating their own symbols. Find good sports photos in magazines. Look for shapes. Have them use a marker to outline directly on the picture. Keep shapes very simple. Trace to form the symbol.

Olympic sports symbols would also lend themselves to interesting block printing and stenciling, as they are simple, yet action-filled.



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THE SOUNDS OF SPORT K-2

OBJECTIVES...to define and learn the basic vocabulary of sound... to discover that sounds are made in different ways...to recognize that sound is a method of communication...to discover that vibrations cause sound...to recognize that the ear is the body's receiver of sound...

NOTE...Some of the activities which follow (especially ACTIVITIES... 1-4...) are more appropriate for older children in grades 2, 3, and beyond. Many of the remaining activities are suitable for kindergarten and grade 1.

BACKGROUND...Sounds are made by vibrations. Anything that is made to vibrate causes air particles around it to vibrate. The particles strike air molecules adjacent to themselves. This chain of vibrations continues traveling outward in all directions from the source. The sensations of vibrations strike a membrane in your ear, the ear drum. The effect of vibrations on the eardrum travel by means of nerves to the brain where the sound is interpreted.

Most of our hearing is done by catching the vibrations that are sent through the air, even though air is, comparatively speaking, a poor conductor of sound. Sound also travels through liquids and solids.

ACTIVITY...*1*...Divide the class into two teams for a game of STEAL. The vocabulary words for the unit (See below.) will be the words and statements used for this game. Directions for play:

- Prepare two sets of cards; one set with the chosen vocabulary words and one set with questions or statements to match the vocabulary cards. For example:

ECHO

4. The skier heard an __________ in the valley.

- Place the vocabulary cards face up on the floor, and line up the two teams on either side of the cards. Have them count off from one.

- The teacher or chosen moderator calls out a statement from the other pack of cards: 4. The skier heard an ______ in the valley.

- The child on each line (team) who is number 4 will try to find the correct answer (vocabulary) card from those which were placed face up on the floor. The first one to find it returns to his/her team with the card.

- If an incorrect card is chosen by one of the children, it is forfeited to the other team. (In that case, it would not be necessary to call the corresponding statement card.) The team with the most correct cards wins.

Suggested vocabulary:

- ear
- vocal chords
- larynx
- tone
- interference
- wavelength
- sonar
- pitch
- echo
- frequency
- vibrate
- reflection
- refraction
- resonance
- soundproof
- eardrum
- tuning fork
- amplitude
- cochlea (and other parts of the ear)

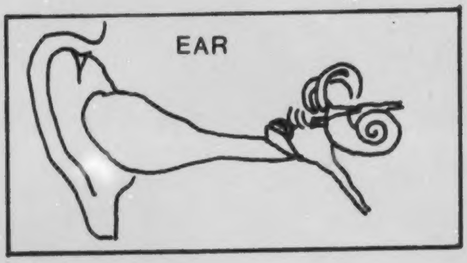
The ability and background knowledge of the students should determine which words are selected.

Provide the children with the word search shown below. Have them fill in the answers to the word search statements and then arrange the numbered letters in each answer to discover the final message. *(Sports have sound.)*

1. *Sound of skates on ice.* ____(swoosh)____
2. *Noise made by hands slapped together.* ____(applause)____
3. *A reflected sound wave.* ____(echo)____
4. *Noise made by gun to start a race.* ____(bang)____
5. *The crowd sent up a* ____(cheer)____ *when the runners finished.*
6. *The skis* ____(vibrated)____ *rapidly, causing a strange sound.*

1.	____ 11	____	____	____ 12	____ 1	____		
2.	____	____ 2	____	____	____	____ 13	____ 6	____ 10
3.	____	____	____	____ 3				
4.	____	____ 8	____ 14	____				
5.	____	____ 7	____	____	____ 4			
6.	____ 9	____	____	____	____	____ 5	____	____ 15

*ACTIVITY...2...*Divide the class into several groups. Ask each group to make a model of the ear using any appropriate available materials it wishes to use. The model must show how and why we are able to hear. Oral reports or written reports should accompany the model.



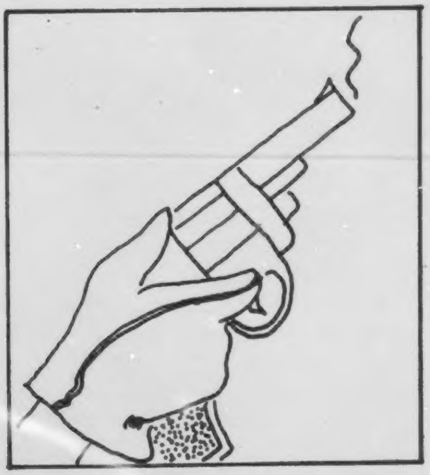
*ACTIVITY...3...*With the class, make a large chart listing sound words that might be used to describe an Olympic sport or activity. Fill in the chart together as shown to the right. Once it is complete, have each student choose one of the words and the sport and write a descriptive paragraph of that sport using both words.

Sound Word	Olympic Event
Bang	Biathlon
Swish	Skiing
Swoosh	Skating
Neigh	Equestrian Events
Thump	Basketball

*ACTIVITY...4...*Make a CATEGORIES game sheet like the one below. Duplicate the sheet and distribute copies to the children. The object is to use the letters in the word sound as clues to the selection of words in each Olympic category named in the column to the left. Discuss the vowel and consonant sounds made when pronouncing each selected word.

Olympic Category	S	O	U	N	D
Sport	skating				diving
Equipment	ski	oar			
Clothing	swimsuit				
Athlete	Spitz			Naber	
Country	Spain		Uganda		
etc.					

*ACTIVITY...5...*Collect pictures of both the Summer and Winter Olympics that show examples of a sound being made. Have the class list the sounds that these pictures suggest. Put the sound words on cards and mount the pictures. Arrange both on the bulletin board so that a matching game is displayed. Attach a piece of yarn or string to each picture. The students will then sketch the string from the picture to the correct sound in a matching activity. The class may find that the same sound may be used for several pictures. Discuss the messages that these sounds and pictures communicate.



*ACTIVITY...6...*Data sheets are fun to do. Try several with your class. Once completed, you may wish to use the data for a lesson in outlining or in writing sentences and/or paragraphs. Refer to the sample data sheet at the top of the following page. Develop variations of your own.

Olympic Equipment

Equipment	The Sound	How it is Made	How it Travels	How it Affects Us
skis	swish	friction		
rifle	crack, bang	hammer, explosion		startling
arrow	whoosh		air	
weights	thud	floor, contact	wood (solid)	vibration
oar	splash		water/air	

*ACTIVITY...7...*Using the newspaper, have each student make a sport and sound dictionary. Find as many words in the newspaper from A-Z that either represent sounds made by or during an Olympic activity or are the names of sports events. Make and illustrate a dictionary using these words. If appropriate, have the children compose brief definitions as well. For example:

A: applause; archery
B: bang; basketball; boxing
C: canoeing; cheer

*ACTIVITY...8...*Collect pictures of musical instruments or bring real instruments to class. Ask the music teacher to participate in this activity and the next. Classify the instruments as string, percussion, or wind. Decide which part of the instrument must vibrate to make the sound.

Make a classroom band with "found materials" such as bottles, combs, pots, pans, wood, nails, and rubber bands. Compose an Olympics-inspired musical arrangement for these "instruments." Perform it as a class.

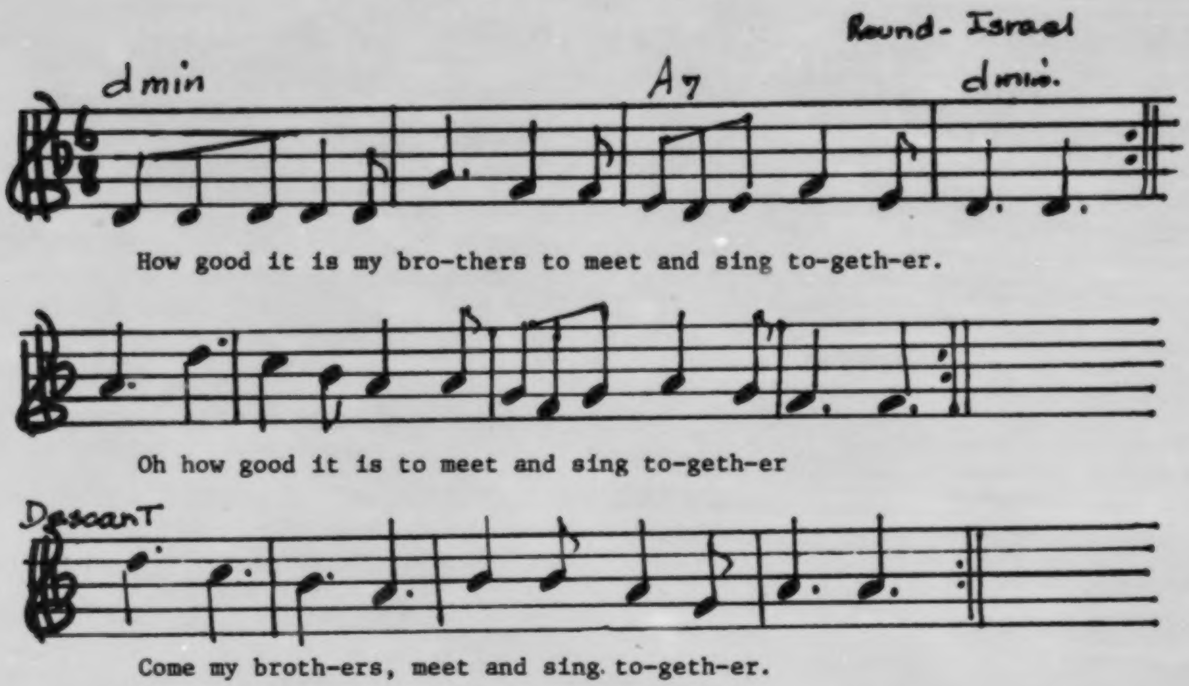
Play a variety of musical selections which might suggest typical sounds and sports of the Olympics. Have the class identify various Olympic activities or sports that would seem to match the music. Discuss.

Ask each student to choose one Olympic sport to pantomime. Choose a musical selection to accompany the pantomime that would describe the mood of the sport. The music might be relaxing, boisterous, bubbly, sweet, or uplifting.

Let each student act out the pantomime and have the others guess what Olympic sport or activity it is. Decide whether or not the music helped establish a mood.

ACTIVITY...9...Songs of Brotherhood. Sing the following song with enthusiasm and rhythmic flow. Sing as a round. Add the descant which can be sung an octave lower for chanting voices. Create an ostinato by using a melodic or rhythmic fragment taken from the song and repeat throughout. Add instruments in improvised or pre-determined fashion. Accompany with harmonic instruments (autoharp, etc.). Refine both singing and playing by describing ways they could be improved given the expressive and musical qualities of the song.

"How Good It Is My Brothers"


Round - Israel
dmin
A7
dmin.
How good it is my bro-thers to meet and sing to-geth-er.
Oh how good it is to meet and sing to-geth-er
Descant
Come my broth-ers, meet and sing to-geth-er.

Discuss the role that songs can play in developing feelings of unity and brotherhood among a given group. Allow students to suggest other songs taken from their past experience that provide the same impetus, such as "He's Got the Whole World in His Hands."

ACTIVITY...10...Play a game of listening with your class. Ask the children to close their eyes. Ask for a volunteer to begin the game by making a sound that would represent an activity or sport of the Olympics. The student who guesses the sound correctly becomes the next one to make a sound for the others to identify.

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FAMILIES, FLAGS, & HERITAGE

2-3

OBJECTIVES...to examine one's own heritage...to understand the diversity of ethnic backgrounds among our people...to appreciate the symbolism of coats of arms and flags...to develop a sense of history...to understand how the Olympics foster friendship among the world's peoples...to learn about the Olympic flag and torch...

ACTIVITIY...1...What do the children know about their own ethnic background? Discuss. How could more be learned? Whose help would be needed?

Play the "Generation Game," described in My Origins — Discovering and Recording Family History, a publication of the Armenian Relief Society. Start with a child holding a blue card — square if the child is a boy, round for a girl. Choose "parents," and give the mother a yellow circle and the father a yellow square. Four "grandparents" hold red cards, and eight "great-grandparents" hold green ones. Organize the card-holders as a family tree. Learn some related terms.

- *Who are your ancestors?* (All the people related to you that lived before you were born.)
- *What is a generation?* (The time between the birth of one set of parents and the birth of their children.)

Look for generations in the family tree model we made. You are the present generation, parents the second generation, etc.

ACTIVITY...2...Prepare and make duplicates of a family tree diagram. Each child should write his/her own name in the bottom space, and outline with a circle or square to denote sex. Send the diagram home with a note describing the project. Ask parents to help fill in names, birthdates, and places. Remind the children that this information is not always easily available. They should not be concerned if parts of the tree are not complete. If exact data cannot be given, ask parents to simply discuss ancestral background with the child.

- *We have been discussing family "trees." What then do you think is the special meaning of the recent television program title, Roots?*

Some children will have more than two parents because of death, divorce, or separation. In these instances, both the biological parents and the other, nurturing, parents are important and have influenced the child. Either or both could be listed on the family tree. Note and discuss the diverse backgrounds represented by the class.

Share with the class Norman Rockwell's "A Family Tree" (Saturday Evening Post, cover, October 24, 1959.)

If any of the children remember moving, briefly discuss their experiences. Point out that all of us have major moves as part of our family history.

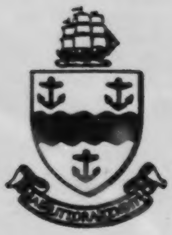
*ACTIVITY...3...*Ask the children to interview older relatives. Letters could be written at school and addressed and mailed from home. Local relatives could help the child compile some notes, or a tape recorder might be used. Questions might include:

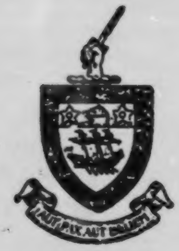
- *Where and when were you born?*
- *Where did you live as a child?*
- *What was your school like?*
- *Tell some funny, exciting, or perhaps sad things that happened.*

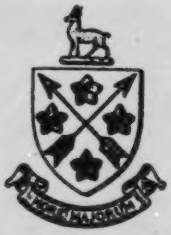
Have a "Grandparents Week." Ask grandparents to visit the class to share any information about family background they feel would be of interest to all of the children.

*ACTIVITY...4...*List on the chalkboard words that tell about members of the class. Try to devise a fitting symbol for your group which represents things the students have in common, or a symbol which represents their diversity.

Show the children pictures of family crests or coats-of-arms which may be found in a genealogical reference book. Discuss the symbols used and their meanings.







- *Why was the family crest also called a coat-of-arms?*

  Think about the members of your family. What are their characteristics and their interests?

  Draw a family flag and write a story explaining the symbols you chose for the flag.

*ACTIVITY...5...*Help the children identify, from the family tree and from questions they have asked at home, the foreign lands in which their families had their beginnings. Have them color in these countries or regions on individual outline maps of the world. (This may be appropriate as a home and school project.)

Name and discuss these countries in terms of their locations relative to, and their relationships with, the United States.

- *Who are some famous Americans who came from (or whose ancestors came from) these countries?*

The very first people to live in North America, arriving in prehistoric times, were Native Americans. If there are no Native American families living in the community, it is unlikely that many children will be familiar with the part these people have played in our society. If possible, ask a person of Native American heritage to visit the class. Read or tell the story of Jim Thorpe, Olympic athlete.

Using a classroom world map or large outline map, make a display showing the ethnic backgrounds of class members. (For example, use surname flags to place on the world map in the appropriate locations.)

Keep the map in place for reference use with Activity 9 below.

*ACTIVITY...6...*Read, The Story of Our Flag, by Louise Lawrence Devine. Discuss the meaning of the stars, stripes, and colors of our flag.

Learn about care and respect for our flag. Ask several Brownies or Cub Scouts to give a special report. View the film, Our Country's Flag.

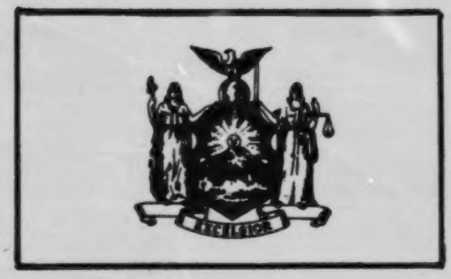
Copy and discuss the Pledge of Allegiance. View the film, The Meaning of the Pledge.

Learn the national anthem. View the film, Our Country's Song.

*ACTIVITY...7...*Read, Benjy's Flag, by Phyllis Kravilovsky, a true story of how an Indian child's design was chosen as the official flag of Alaska. Tell what each part of Benjy's flag symbolized.

Tell the class about your state flag and discuss the meaning of its design.

New York State Flag



*ACTIVITY...8...*Make available books illustrating flags of the world. (e.g., Flags of All Nations — and the People Who Live Under Them, by Elting and Folson.)

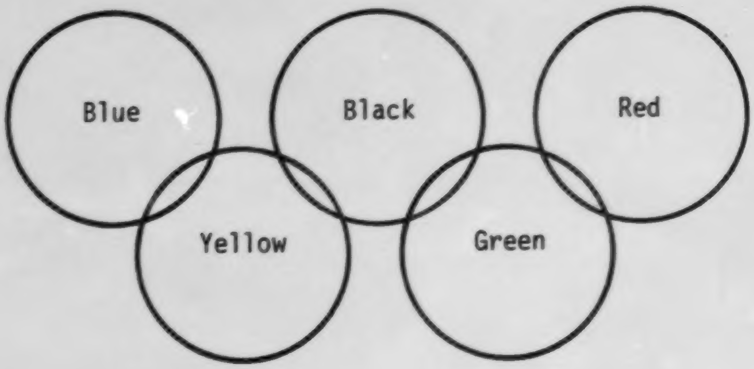
Make a flag of another nation using a 9" x 12" piece of drawing paper.

Find that country on a map of the world.

Have an Olympic parade! Use the flags for some marching fun. Such a parade could open an Olympic Day school program.

Look up the flag of the United Nations, showing world map and olive branches, symbol of peace.

*ACTIVITY...9...*Display a picture of the Olympic flag.



- *What do the rings represent?* (the five major continents — Europe, Asia, Africa, Australia, and America, North and South)

- *Why are the rings linked?* (to denote the friendship of the peoples of the earch, whatever their creed or color)

- *Why were the colors chosen?* (At least one of the colors, blue, yellow, black, green, and red appears in the flag of every nation of the world.)

Using colored construction paper, make an Olympic flag.

Refer to the world map display with the surname flags which was prepared for Activity 5.

- *Which of the countries related to your ancestry usually send athletes to the Olympic Games?*

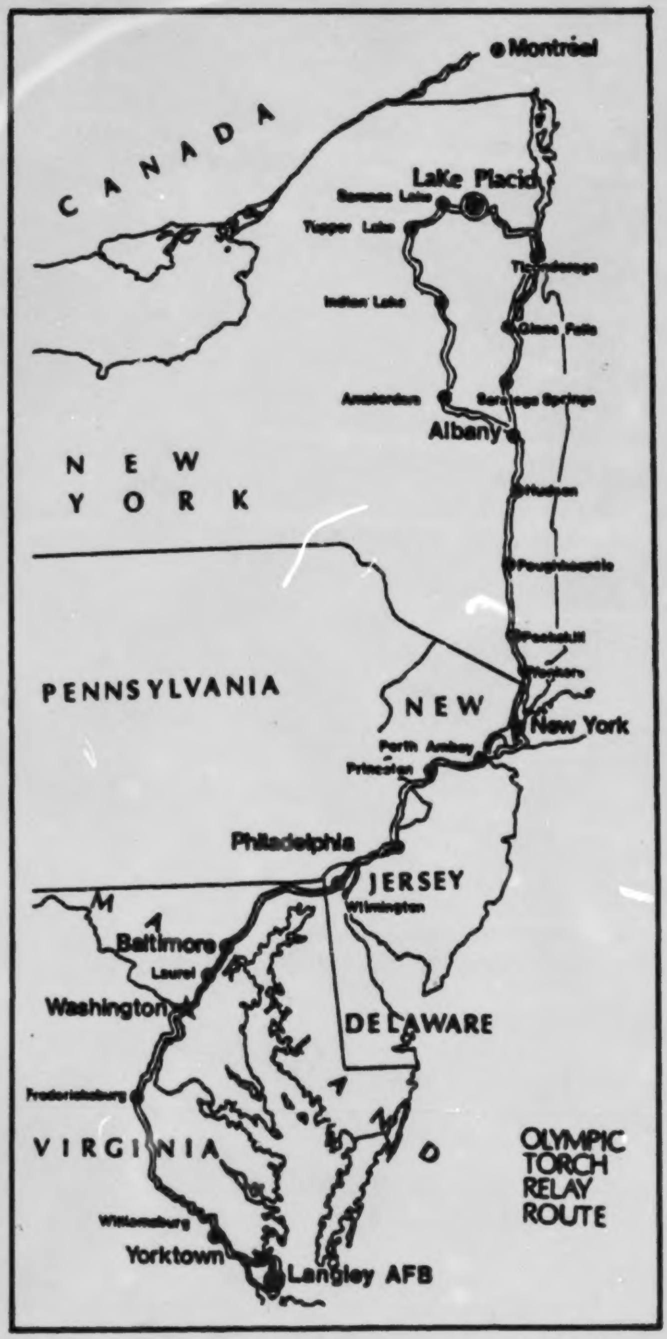
- *Can you find out the names of some of these athletes and their events from descriptions of recent Olympic games?* (almanacs, encyclopedias)

Have children bring in pictures of Olympic athletes. Have as many countries as possible represented. Point out that the Olympic Games are contests for individuals from all over the world, and were not meant to be national rivalries. Use the pictures to make a display with the Olympic flag and a world map entitled, "Athletes of Our World."

*ACTIVITY...10...*Discuss the symbolic meaning of the Olympic flame which burns in the main stadium throughout the Olympic Games. For the XIII Winter Games in Lake Placid, a relay of torch runners carried the torch from Virginia through the original thirteen states to Lake Placid, New York for the opening ceremony.

Carried by air, land, and sea, the eternal Olympic flame arrived in Lake Placid for the official opening of the 1980 Winter Olympic Games.

The flame was flown from Greece to Langley Air Force Base near Yorktown, Virginia. Then the flame was divided and carried in several "miner's lamps," ready to rekindle any torches which were extinguished. The flame was carried by a relay team composed of 52 specially chosen American men and women. A nine-day, one thousand-mile run took the runners and torches through many historic American towns. These included Williamsburg, Washington, Philadelphia, Princeton, New York, and Albany. When the torch reached Albany, the runners split into two teams of torchbearers, who traveled two different routes to Lake Placid. Both teams arrived in Lake Placid on February 8, 1980, five days before the Games began.


Montréal
CANADA
Lake Placid
Saranac Lake
Tupper Lake
Ticonderoga
Indian Lake
Glens Falls
Amsterdam
Saratoga Springs
Albany
NEW YORK
Hudson
Poughkeepsie
Peekskill
Yonkers
PENNSYLVANIA
NEW JERSEY
New York
Perth Amboy
Princeton
Philadelphia
Wilmington
MARYLAND
Baltimore
Laurel
Washington
DELAWARE
Fredericksburg
VIRGINIA
Williamsburg
Yorktown
Langley AFB
OLYMPIC TORCH RELAY ROUTE

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2-3 ART GALLERY OLYMPICS

OBJECTIVES...to develop skills in using a variety of art mediums...to stimulate curiosity and a desire to experiment with numerous types of materials...to encourage creative thinking and personal expressions...

ACTIVITY...1...Let each student choose pictures of an Olympic event or sport, either from a magazine or the newspaper. The picture should be centered on a sheet of paper, leaving room on both the left and right sides. Using either crayons, magic markers, charcoal, etc., students should draw a scene to the left of the chosen picture which shows what might have happened just before the picture was taken. The same should be done to the right of the mounted picture, showing what might have happened right after the picture was taken.

ACTIVITY...2...Research arts and crafts projects done by children in other countries and areas of the world. Some suggestions are:

- Mexico - Piñata
- Japan - Origami
- Africa - drums
- Italy - Piggy-in-the-pen

Display books and pictures that show these art projects. Let the students choose one of the countries and an art project.

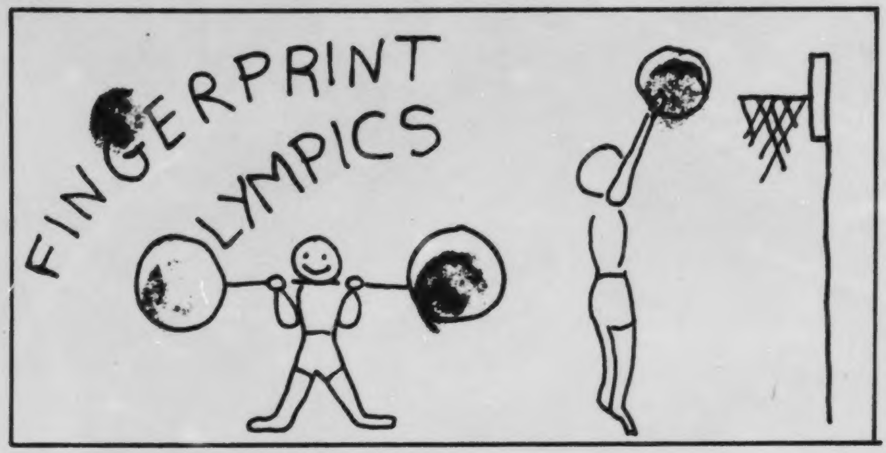
When the projects are finished, help the students make an exhibit of their work. Reports on the projects, the countries they represent, and their customs would be appropriate.

ACTIVITY...3...Create stained "glass" windows for the classroom using construction paper and colored cellophane. Have each student choose a favorite Olympic sport and draw on construction paper a scene which depicts that sport in some way. Cut out the drawing within the outline and replace the construction paper with different colors of cellophane. Display the drawings in the classroom windows.

ACTIVITY...4...Have the students create a design entitled, "Fingerprint Olympics," using ink pads, plain paper, and felt pens. The design should, as in the illustration on the following page, make use of the patterns from their fingerprints. The students may either make pad prints on the paper first and draw around them or draw the picture and add the prints.

ACTIVITY...5...Design wrapping paper for a special holiday using the repeating pattern techniques. Have each student bring in a piece of plain tissue wrapping paper. Each student will sketch an athlete engaged in an Olympic sport, paying careful attention to line and gestures. When completed, they will reproduce that sketch as a repeating pattern on the tissue paper. Color can be added with crayons or magic markers. The paper can then be used to wrap a gift made in school for a special occasion (Christmas, Valentine's Day — Winter Olympics; Mother's, Father's Day — Summer Games).

A related activity would be to have the children create greeting cards featuring Olympic events or athletes. Items from nature such as leaves, flowers, grass, and feathers can be incorporated into the design.



*ACTIVITY...6...*Make an Olympic mural with the class, using wallpaper samples collected from local stores.

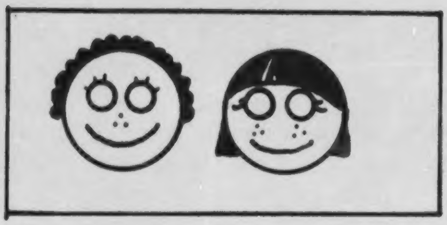
*ACTIVITY...7...*Collect a variety of plastic soap bottles. Divide the class into several small groups and ask each group to write a short Olympic skit. Provide scissors, fabrics, paper, yarn, and glue for the students to make puppets (actors) from the bottles.

*ACTIVITY...8...*Using seeds, macaroni, spaghetti, etc., have each student design a mosaic scene. This scene should depict a feature or custom of one of the countries which has held either the Summer or Winter Olympics. Research will be needed to determine what countries these are and what characteristic scenes the students wish to create.

*ACTIVITY...9...*Make a collection of buttons with the class. For practice in classification skills, the buttons can be placed in categories, e.g., color, size, composition (bone, plastic, metal), and appearance (number of holes). Let the children suggest the categories. Once the children are familiar with all of the buttons collected, suggest the following button projects with an Olympic theme:

- Design an Olympic scene on fabric, sewing buttons on to represent the round items in the scene.
- Discuss what pieces of Olympic clothing use buttons, if any. Design an Olympic outfit using buttons. The design can be placed on heavy cardboard and the buttons glued on.

- Design an "official" Olympic button. Use fashion designer buttons as models.
- Draw caricatures of Olympic stars and use buttons on the drawing for the eyes, the nose, and buttons on the clothing.



*ACTIVITY...10...*Plan an Olympic art and cultural exhibit for the school. Use student creations produced for the activities above or select from the additional projects enumerated below.

- Collages — summer and winter sports; equipment; clothing; clippings
- National flags, maps
- Clay sculptures
- Alphabets around the world
- Puppets
- International road signs and other symbols
- Costumes
- Dioramas
- Sketches of athletes in action

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OLYMPIAN CALCULATIONS (I)

2-3

OBJECTIVES...to provide drill in the four basic operations of arithmetic at the appropriate level for each child...to use the Olympic torch and Olympic symbol in this drill, providing background information on both so that the students can describe the torch ceremony and the Olympic symbol and flag...to use comparisons of Olympic records as subjects for drill...to compare the numbers of medals won by each country for drill...to record, read, and analyze data from a graph for drill...to solve Olympic puzzles and dot-to-dot activities for reinforcing arithmetic facts...to conduct a "matholympics" in your classroom, using competition to reinforce facts...

ACTIVITY...1...Begin this Olympic arithmetic unit by giving the children some background information about the torch lighting ceremony and its meaning.

Present the activity shown on page 46 on an overhead projector. This activity may be used for skip counting, introduction to multiplication, or mixed drill. Each staircase has its own rule:

A - Rule: + 3; Starting #: 6; Answer: $n = 12$
B - Rule: + 5; Starting #: 7; Answer: $n = 47$
C - Rule: + 3 - 2; Starting #: 8; Answer: $n = 17$

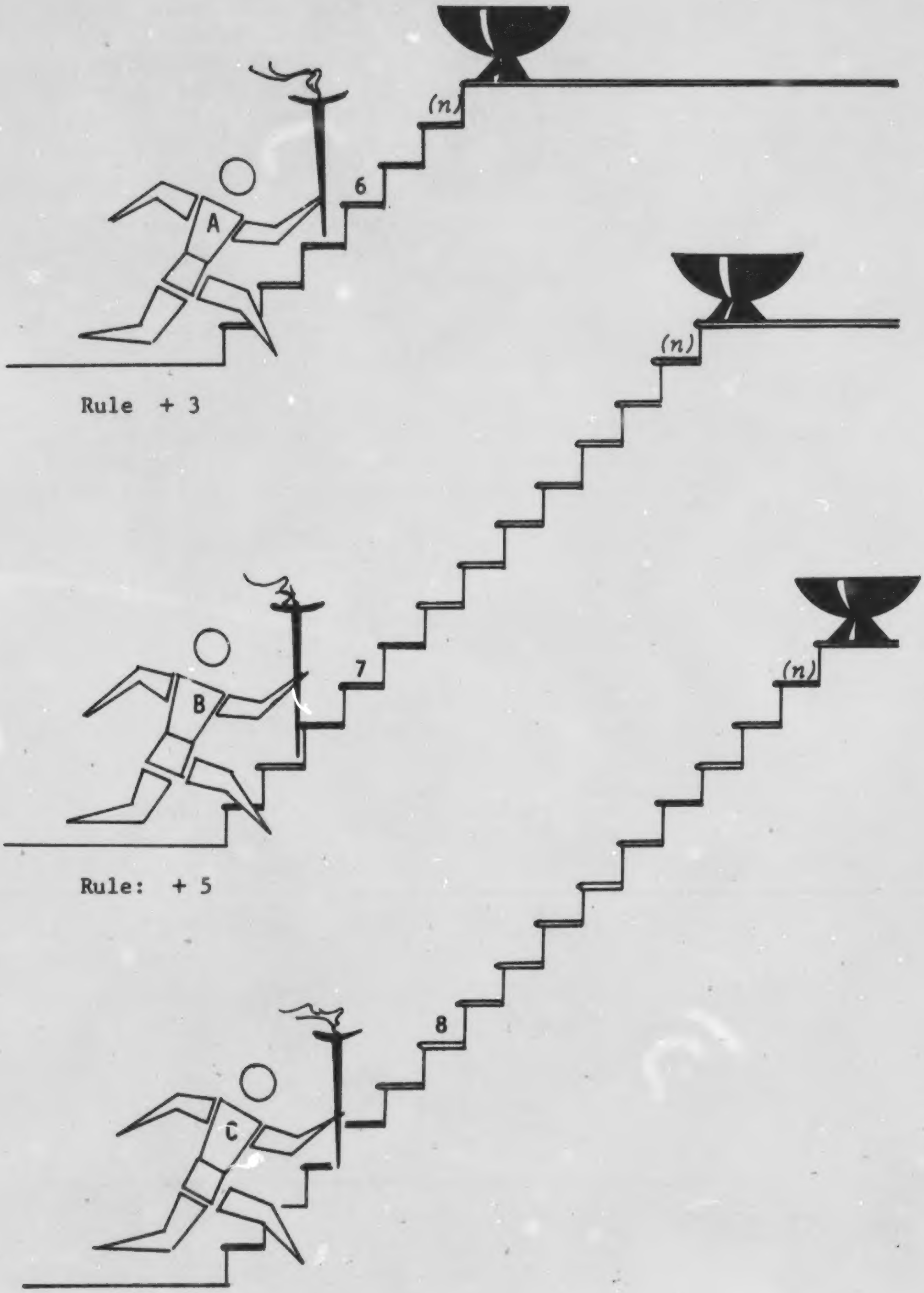
ACTIVITY...2...Using the charts for the official Olympic results from The Story of the Olympic Games 776 B.C. to 1976 by John Kieran and Arthur Daley, or any other appropriate source, divide the class into teams, giving each group sets of scores to work with.

Have each group determine whether its events were scored in points (e.g., basketball), by time (e.g., swimming), by distance (e.g., shotput), or by decision (e.g., boxing).

For the point-scoring events, show the difference in scores from 1972 to 1976 for each.

In the timed events, determine the difference between the 1896 time and the 1976 time.

Find out the difference in winning distances by comparing the results of the events in 1896 with those in 1976.



Rule + 3

Rule: + 5

Rule: + 3 - 2

ACTIVITY...3...Use a chart showing the medals, gold, silver, and bronze, won by each competing nation during a particular Olympiad. Divide the class into teams as before.

- *Which country had the most gold medals? silver? bronze?*
- *How many countries received no medals?* (This may require some research to determine how many nations participated. The students may then subtract the number of nations listed on the medal chart.)

ACTIVITY...4...Have the children do the math/coloring activity, COLOR ME "FAST", on page 48.

ACTIVITY...5...Distribute the CONNECT-THE-DOTS activity on page 49.

ACTIVITY...6...Ask the children to survey at least 10 people not in their class to determine the favorite Olympic athlete and favorite sport of each. Help them collate the results and make graphs which represent the information gathered.

Play the game, "My Favorite Olympic Star," having each child equate the letters in his or her star's name with the following point code:

all vowels ——— 1 point each
b, c, d, t, s, t — 5 points each
f, g, h, j, k, l — 10 points each
q, x, z ——— 25 points each
all others ——— 50 points each

Do the last name (surname) first. Which Olympian has the "worthiest" name?

Do the first name. Which one(s) is (are) worth the most?

Total the points for both first and last names. Who is the winner?

Vary the game by making it "My Favorite Olympic Sport." You may wish to alter the letter-point values so that the children are encouraged to select favorites rather than point-getters.

ACTIVITY...7...Plan and stage a "matholympics" by organizing these games and puzzles and others in a competitive format. Challenge another class to compete with yours.

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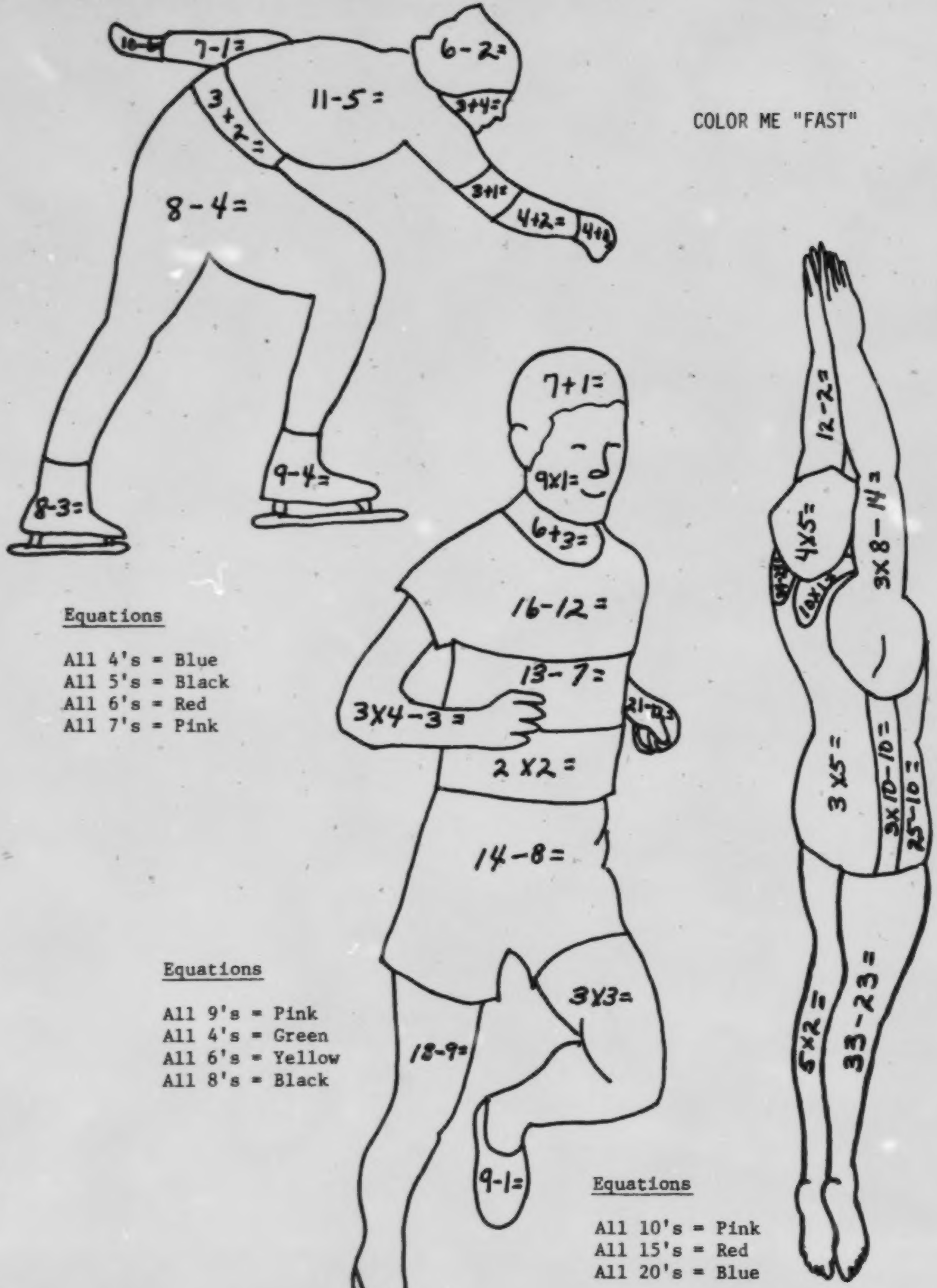
COLOR ME "FAST"


10-4
7-1=
6-2=
11-5=
3+4=
3×2=
8-4=
3+1=
4+2=
4+1
9-4=
8-3=
7+1=
9×1=
6+3=
16-12=
13-7=
3×4-3=
21-12=
2×2=
14-8=
3×3=
18-9=
9-1=
4+4=
12-2=
3×8-14=
4×5=
10×1=
3×5=
3×10-10=
25-10=
5×2=
33-23=

Equations

All 4's = Blue
All 5's = Black
All 6's = Red
All 7's = Pink

Equations

All 9's = Pink
All 4's = Green
All 6's = Yellow
All 8's = Black

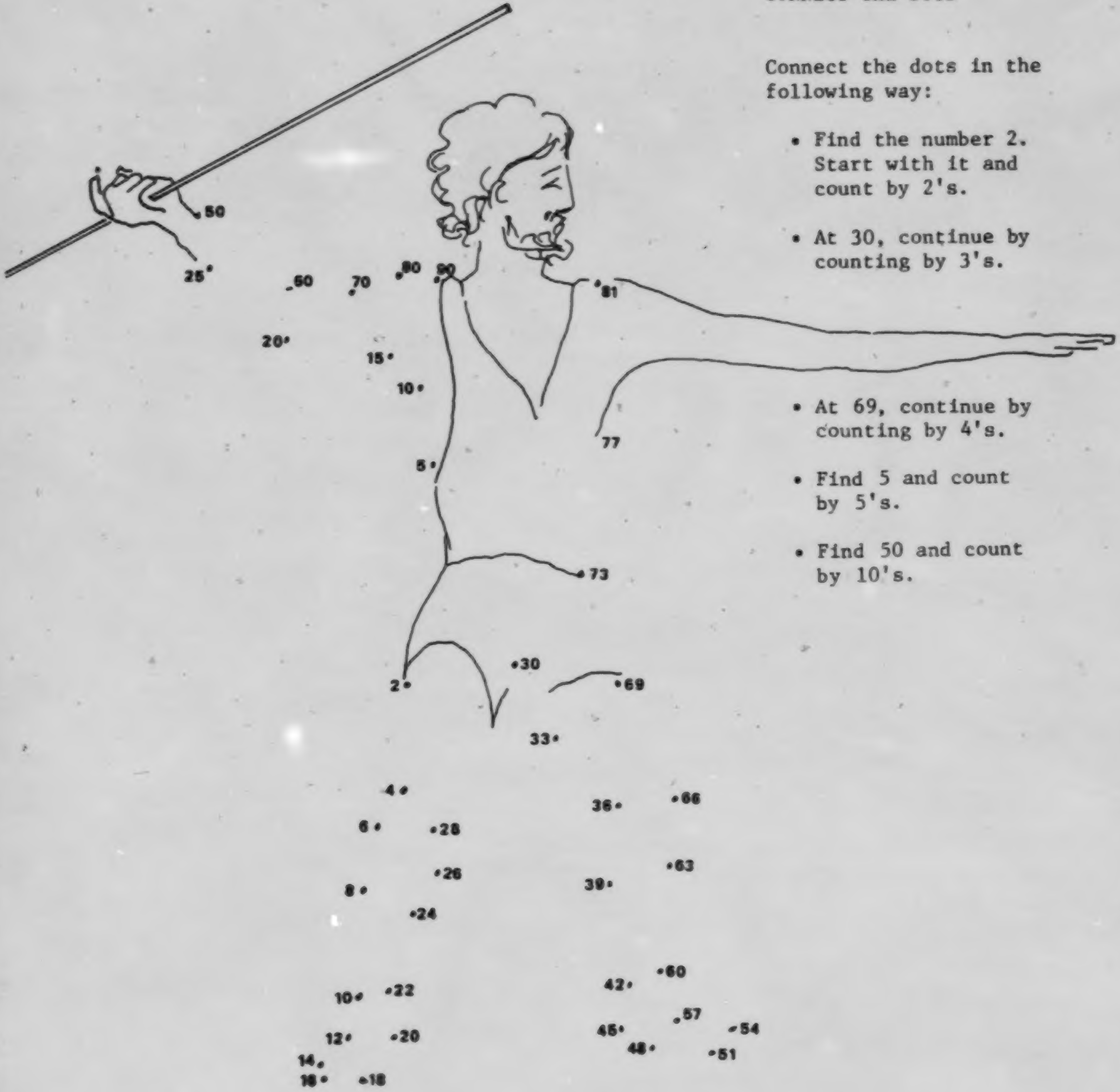
Equations

All 10's = Pink
All 15's = Red
All 20's = Blue

CONNECT-THE-DOTS

Connect the dots in the following way:

- Find the number 2. Start with it and count by 2's.
- At 30, continue by counting by 3's.
- At 69, continue by counting by 4's.
- Find 5 and count by 5's.
- Find 50 and count by 10's.


50
25
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16
18

3 MUSEUMS

OBJECTIVES...to understand the nature and purpose of museums... to determine the importance of collecting, preserving, displaying, and interpreting objects in a museum...to learn about the location of the Olympic Museum, the history of its development, and the exhibits and items it contains...to list the careers available in museum work and to define what museum occupations entail...to set up an "Olympic Museum" in the classroom...

BACKGROUND...Many of the field trips that we take with our students each year are to museums. How often do we really help them to understand what a museum is and just how important it is to all of us?

Humans seem to have a great need for collecting, preserving, displaying, and interpreting natural, humanmade, living, and nonliving things. In presenting these objects to the public, museums endeavor to give complete educational programs to the public. Emphasis is constantly placed on both past and present art forms. Museum collections indicate societies' values. Museums enhance humankind's ability to increase its knowledge through research.

Baron Pierre de Coubertin realized that there was a need to collect, preserve, display, and interpret the Olympic games for all humankind. He was largely responsible for the fact that an Olympic Museum opened in 1934 in Lausanne, Switzerland. The museum has grown in both its collection and purposes since that time. (See REFERENCE: Olympic Review, on page 53.)

ACTIVITY...1...Begin this unit with a "grab bag" activity by placing eight or nine items that would represent Olympic memorabilia for museum purposes into a bag (e.g., photograph of the torchbearer, Dorothy Hamill's skates, a hockey puck from a medal game, an Olympic medal).

Take an item from the bag and explain what it is.

- *Why is this item important in terms of the Olympic event or activity it represents?*

- *Does it have meaning in terms of all the Olympiads or just in terms of the games of which it was a part?*

- *Would people be interested in this 20 years from now? Why or why not?*

- *What can be done with those items which would be of interest to people many years from now?*

Use a dictionary to learn all the things that museums are or can be.

- *Name some famous museums. Are there different types of museums? Explain.*

Using the appropriate map (state or national), pinpoint the locations of museums the children have visited.

- *What was the theme or specialty of each museum you visited?*

ACTIVITY...2...**Plan a class trip to an area museum. Arrange for the class to meet with the museum director or one of the staff members for a question-answer session. Prepare questions with the class prior to the trip.**

Name the theme(s) of the museum and list the kinds of items on display (for each theme).

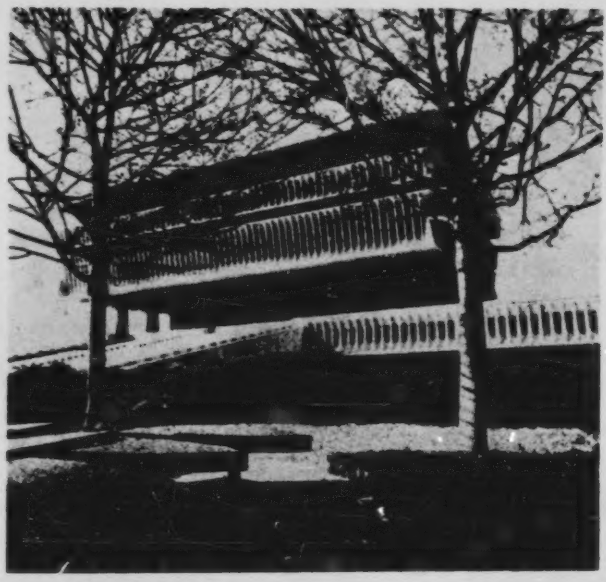
Describe the ways in which various exhibits are designed.

- *How does the museum acquire items for the collection(s)?*

- *Do all items belong to the museum? Explain.*

- *How are decisions made about which exhibits will be featured?*

- *How does the museum encourage the public to visit?*



Home of the New York State Museum

- *Are there any special, educational programs for the public? for schoolchildren?*

- *What is it about an object that makes it "eligible" for exhibiting in a museum?* (value..beauty..scarcity..age..uniqueness..etc.)

- *What is research? How are museums involved in research?*

- *Describe the tasks performed by each type of museum employee (director, curator, educator, exhibit specialist).*

*ACTIVITY...3...*Have the class pretend to be the staff of an Olympic Museum. Divide the class into several groups of four or five children, with each group assuming the role of a different museum employee. Establish a mini-Olympic Museum in the classroom.

Museum Director group: *list the exhibits that will be created for the classroom museum (with suggestions from the others); supervise (and assist in) the collection and construction of the exhibits; prepare publicity for the museum.*

Exhibit ideas

flags of nations
Olympic medals
track and field events
the decathlon
women athletes
the weightlifters
figures in skating
sites of the Olympics

Exhibit Specialist group: *collect and construct exhibits for display with assistance from the art teacher; use a variety of formats such as: photography; mobiles; stabiles; museum boxes; drawings; etc.*

Curator group: *care for the exhibits and do the research necessary to "verify the authenticity" of the exhibits.*

Educator group: *plan an interpretive program for the benefit of visitors from other classes.*

Invite other classes to the museum exhibit or send museum boxes out on loan to other classes.

Ask the class to do research on the Modern Olympic Museum in Lausanne, Switzerland. The students might compose letters requesting information from:

United States Olympic Committee
Olympic House
1750 East Boulder Street
Colorado Springs, CO 80909

International Olympic Committee
Lausanne, Switzerland

*ACTIVITY...4...*Provide the class with an opportunity to do a museum careers summary based upon the information gained from their interviews during the field trip and from their experiences in creating a classroom museum.

- *What careers are available in museum work?*
- *What responsibility does each job have?*
- *How may these skills be learned?*
- *How many people were employed in each job in the museum(s) visited?*
- *Were all of the jobs paid positions? Were any volunteer positions?*
- *Did the museum workers like their jobs?*
- *Which of the jobs would you like to do?*

RELATED ACTIVITIES...

1...Make a classroom movie of your museum efforts as an effective means to communicate to others what a museum is and how to develop one in the classroom.

2...As an extension of the museum boxes activity, have each classroom in the school develop one "Olympic Museum Box" and share with other classes and/or schools.

3...Suggest that each student solicit a pen pal in another city and/or state. (One could perhaps write to Lausanne, Switzerland.) Share information about museums with the pen pals.

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3 READING COMPREHENSION

OBJECTIVES...to evaluate reading comprehension skills...to increase vocabulary...to broaden knowledge of the Olympics...

*ACTIVITY...1...*Students are to work through the following four reading passages, one at a time, in sequence, at their own rates. The information requested in the five questions following each passage is factual, inferential, and will build vocabulary. In addition to providing the students with information, it may serve a diagnostic purpose for the teacher, indicating skills that need teaching or reinforcing.

As students progress through the reading comprehension passages, inform them individually of their scores. When all four passages have been completed, have students add their scores and use the total to determine their "Olympic status," based on the following scale. The awarding of an inexpensive token to each participant might be appropriate. It is recommended that "prizes" be given to all, in the spirit of the original Olympics, rather than just to those who score 13 or higher.

Passage No.	Questions	Questions Correct
1	5	
2	5	
3	5	
4	5	
Total	20	_____

No. Correct
No. Correct

18 - 20 —— Gold Medal
15 - 17 —— Silver Medal
13 - 14 —— Bronze Medal
12 and below—Out of shape - more practice needed

Passage #1

A game is a sport that is played by two or more people. The game may be one in which the players do a lot of thinking, like cards, or one in which the players are very active, running, jumping, and skating. Each player tries to win the game, but all players must follow the rules. When players play together, against others, instead of against each other, they are called a team. Teams, like soccer teams, play against each other. When a player is good at a sport, it means he or she has skill at that sport.

- *What is another word for a game?* (sport)
- *What are the people who play a game called?* (players)
- *What does a player need to be good at a sport?* (skill)
- *When playing a game, players cannot do just anything they wish. Why not?* (They have to follow rules.)

Passage #2

The Olympics are 2,775 years old. They were started in a country called Greece by a very strong man named Hercules. These very old or ancient games were like large parties. Poets and dancers were a part of the fun, as well as the athletes who played in the games. The name of the place in Greece where the games began was called Olympia. These games were played every four years.

- *Why do you think these games are called Olympic games?* (They began in a place called Olympia.)
- *Find a word in the story that means very old.* (ancient)
- *How many years are there between Olympic Games?* (four)
- *What is another name for a player?* (athlete)
- *Besides those who played in games, who else took part in the ancient Olympics in Greece?* (poets, dancers)

Passage #3

The modern or new Olympic Games that we see on television today began in 1896. The Olympics are now contests among athletes of many countries rather than just games for the Greeks. They are held in the winter and summer every four years. The athletes who play in the games are amateurs, which means they cannot be paid to play their sport. When these men and women from different countries meet in the Olympic Games, they play their best, within the rules, and they get to know and respect each other. This is called good sportsmanship. A flame burns throughout the games in memory of the flame which was burned in first Olympic Games to honor the god Zeus. In the modern Olympics, the flame is brought all the way from Greece to the nation which is the site of the games. (See page 41.)

- *Tell one way in which today's Olympics are different from the first Olympics in Greece.* (The games are for athletes from many nations.)
- *What is an amateur athlete?* (one who does not get paid to play a sport)
- *Why do you think the Olympic flame is brought from Greece?* (The Olympics began in Greece.)
- *What is a word in the story that means fair play?* (sportsmanship)
- *In the last sentence, find a word that means the same as a place.* (site)

Passage #4

Each game in the Olympics is called an event. There are 29 of these events. There are 21 of these events, such as swimming, field hockey, canoeing, and the like, in the Summer Games. The Winter Games have eight events, including skiing and figure skating. The person who wins the event is given a gold medal, the person who is second is given a silver medal, and the person who is third is given a bronze medal. It is nice to win a medal, but to the athletes, the honor of playing for one's country is as important as winning.

- *During what two seasons are the Olympics held?* (summer and winter)

- *Match the following by drawing a line from Column A to Column B.*

Column A	*Column B*
silver medal	*third place*
gold medal	*second place*
bronze medal	*first place*

- *Why do athletes take part in the Olympics?* (to compete for their country; to be known as being among the best in the world in their sport; to win medals which are proof of their excellence)

- *In the Olympics, games are called by a special name. What is that name?* (an event)

- *About how many events are there in the Olympics?* (29)

*ACTIVITY...2...*Conduct a spelling and/or vocabulary contest using the words introduced in the passages. (See also Activity 4 on page 124.)

sport
athlete
amateur
sportsmanship
team
skill
Olympics
event
ancient
site
modern
medal

*ACTIVITY...3...*Direct each student in the writing of five grammatically and factually correct sentences about the Olympics.

*ACTIVITY...4...*Develop a crossword, scramble, or other related type of activity to help the students learn Olympic terminology.

*ACTIVITY...5...*Prepare a cloze exercise (a reading comprehension exercise which requires that the student supply words which have been systematically deleted from the passage) using the terminology of the Olympics. This may help you determine whether a student is reading at the literal, interpretive, or applied level.

MUSCLES: A POWERFUL PULL

3

OBJECTIVES...to learn how a single muscle contracts...to record a series of timed muscle contractions...to experience the effect of encouragement and competition on the rate of muscle contraction...to observe the fatigue of a single muscle...to define and learn the basic vocabulary of muscle contraction...

BACKGROUND...Olympic athletes run, jump, turn, flip, slide, roll, stand on hands, swing, throw, toss, lift, mainly as a result of a mechanical-biochemical, energy-producing process called muscle contraction. Athletes also pant, grunt, scream, groan, shout (hopefully in victory), as these same muscles undergo tetany, fatigue, sprain, strain, and sometimes serious injury. "The thrill of victory and the agony of defeat" may well be described as mental experiences, but the muscles, although subservient to nervous regulation...an adequate supply of critical food and oxygen...and effective only through their engagement with the skeletal system...make it all possible for every athlete.

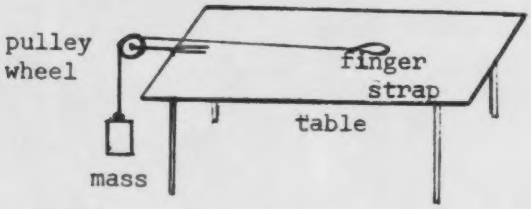
ACTIVITY...1...Find an illustration or overlay of the human body's muscular system in an encyclopedia (World Book has a good one.) and display it on the opaque or overhead projector or pass it around the class. Emphasize the role played in athletic events by the many types of muscles.

- *How are muscles arranged in the human body?*
- *How many skeletal muscles are available to the human for exercise and athletics?*

ACTIVITY...2...Demonstrate and define the contraction and relaxation of a single muscle.

- *Does a muscle "push" or "pull" when it contracts? Can it do both?*
- *If a muscle on one side of an arm or leg relaxes, what is the opposite muscle doing?*

After organizing the class into five teams of students, prepare the simple muscle contraction device below to use in a "muscle team" contest.



Explain to the students that the contraction of a single functioning muscle can be accomplished as follows:

> *Insert the first finger (left or right) into the leather strap and affix at the first joint at the tip of the finger.*
>
> *Lift the 500 gram-mass (weight) by contracting the forearm muscle which is attached to that finger by means of a single tendon.*
>
> *A complete contraction is defined as movement of the finger until it touches the palm of the hand. The other three fingers and thumb should be immobilized to prevent them from interfering with the first finger.*

Now ask each group to select a team leader and a recorder and to initiate the "muscle team" contest as follows:

> *Each member of the group will perform once by lifting the 500-gram mass described above.* **(Caution: a weight that is too heavy to begin with might discourage many students and possibly result in a minor injury.)**
>
> *The object of the contest is for each member to lift the mass each time with a full contraction and to attempt to accomplish this as many times as possible before fatigue of the muscle occurs, i.e., when the mass can no longer be raised with a full contraction.*
>
> *While an individual is performing, the four remaining contestants should be silent.*
>
> *The "muscle team" with the highest combined number of contractions wins the contest.*

Some variations might be incorporated into subsequent contests.

- **Direct the members of all the groups to cheer and encourage each of their team members (if necessary).**
- **Increase or decrease the mass (weight).**
- **Tell the "muscle team" members to use a different finger.**
- **Apply a time limit to the contest.**

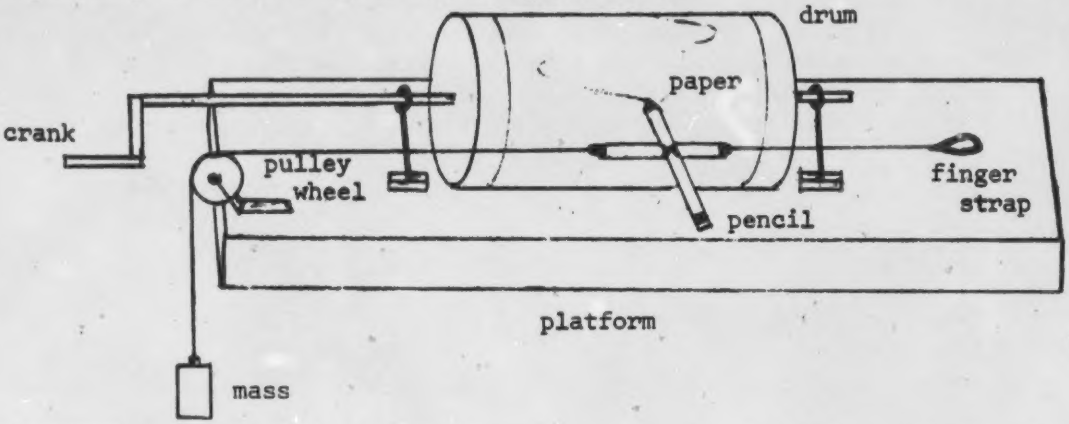
*ACTIVITY...3...*A unique variation of the previous exercise consists of constructing the "ergograph" diagrammed below and substituting it for the "simple muscle contraction device." This machine differs from the previous device because it:

- Records the muscle contractions for each competitor on a rotating drum
- Instills more competition and team cooperation into the activity
- Vividly demonstrates and records muscle fatigue

The ergograph is not difficult to build. The following materials are needed: metal or plastic can (approx. 7" high x 4" diameter), 1/2" wooden dowel, 1" x 1" wooden strip, 1 1/2" pulley wheel, 10" x 16" x 1" board, 1/2" metal eyelets, pencil, paper, cord, and a 500-gram mass.

Since only one machine most probably would be constructed, only one group can be processed at a time.

You may wish to consider staging a grade level-wide or a schoolwide competition. Explain to participants that differences in degree of physical development will contribute to noticeable differences in performance, especially if it is a schoolwide competition.



ACTIVITY...4...Conclude the unit by discussing the following with the class.

- *Describe muscle fatigue. State the physical and chemical causes.*
- *Define "second wind."*
- *Discuss and demonstrate how the length of limbs (arms and legs) influences the effectiveness of muscle contractions during certain athletic events. What is leverage?*
- *Learn about proper treatment for muscle pulls, sprains, and strains.*
- *Consider the reasons why an athlete performs better when encouraged or when challenged by competition.*
- *Discuss the purpose and value of physical conditioning in relation to the efficiency and effectiveness of muscles during athletic events.*

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3 FREE TO BE ME

OBJECTIVES...to learn to recognize, and appreciate, the differences and the similarities among people...to discuss the relationship between feelings and human behavior...to understand the need to respect the individuality of others...

NOTE...This unit may also be used in grades K-2 simply by providing a greater degree of teacher direction during most of the activities.

BACKGROUND...The Olympic games promote the spitit of shared struggle, shared enjoyment, and shared pride in human abilities. Likewise, in playing a game, children come to realize the "thrill of victory; the agony of defeat," and the exhilaration of participation. Goodwill among humankind can come about only as a result of first understanding oneself and others, including the differences and similarities therein. The classroom environment should provide students with opportunities to grow in this understanding, and to build individuality and self-respect.

ACTIVITY...1...Discuss the physical characteristics of people, emphasizing the theme, "No Two Are Completely Alike." Have the children make a list of these characteristics. Discuss with them the feelings that people have. (See questions below.) Provide them with white construction paper which is divided into the appropriate number of sections (characteristics) to be colored.

Color the sections of your paper according to the key for the features and feelings we have talked about.

Section	*Feature/Question*	*Color to use(choose one)*
1	*Hair*	*red, brown, black, yellow*
2	*Skin*	*white, brown, black*
3	*Eyes*	*green, blue, brown, purple (for other eye colors)*
4	*Sex*	*blue (boy), pink (girl)*
5	*Main interest*	*red (sports), green (art) purple (music), yellow (reading), orange (other)*
6	*Ques. #1 (below)*	*red (angry), yellow (happy), blue (sad), orange (afraid)*
7	*Ques. #2 "*	*"*
8	*Ques. #3 "*	*"*
9	*Ques. #4 "*	*"*
10	*Ques. #5 "*	*"*

1. *How did you feel on the first day of school this year?*
2. *How do you feel after arguing with someone?*
3. *How do you feel when you are alone in your room?*
4. *How did you feel after your last test?*
5. *How did you feel when you came to school today?*

You can also use selections of music or show a variety of pictures to elicit responses from the children. Each child "should" possess a uniquely colored composition when done. Have the children share their compositions and discuss their differences and similarities.

- *What makes people different? Is it good or bad to be different from each other?*
- *Are any of the compositions very similar? How many of the same-numbered sections of these similar compositions have the same color?*
- *Are any of the composition identical for sections 1-10?* (If there are any identical compositions, have the "artists" find things about each other which are different.)

*ACTIVITY...2...*Direct the students to cut out pictures of people from all over the world. Have magazines available or assign the activity for a homework assignment. Students should then combine their best pictures to form one or two montages entitled, "No Two Are Alike."

*ACTIVITY...3...*The children should be encouraged to express their own feelings and to discuss feelings of others. This is a good opportunity for you to develop a sports theme. Show the class pictures of athletes who are demonstrating different feelings or emotions (victory, defeat, disappointment, pain, joy). Discuss the different feelings portrayed and their likely causes. Encourage the students to share personal experiences with the whole class.

Suggest the students volunteer to pantomime one of the following:

- How a person feels when he/she has won a medal of honor
- How a person feels when he/she tries again and again to do something, but fails
- How a team feels when it wins a championship, or loses a championship
- How a person who doesn't have any friends feels

Involve the students in a puppet-making project. Use the puppets to demonstrate the above situations. Point out that different people often react differently and feel differently when in the same situation.

ACTIVITY...4..."You're a Good Sport, Charlie Brown" Booklet. Students will enjoy creating booklets of their own which express their personal feelings about some important points concerning competition. Have each child complete the following page captions and "illustrate" appropriately (pictures or sketches).

Winning is ______________________________

Losing is ______________________________

Sharing is ______________________________

Honesty is ______________________________

Cooperation is ____________________________

A true individual is _______________________

Team Spirit is ____________________________

Self-Confidence is _________________________

*ACTIVITY...5...*Student-of-the-Week. It is important to build self-confidence in students throughout the year. Each should have an opportunity to be "honored" as a unique and worthwhile individual. One student each week should be chosen.

> *Make a bulletin board about yourself by bringing in pictures, medals, trophies, etc., from home. The display may be about family, hobbies, or special interests.*

Arrange for the honored student to receive a "medal of honor," a "Student-of-the-Week" certificate, and a "compliment book" at a special presentation ceremony. The booklet should be made by the students and should include a written compliment to the "Student-of-the-Week," poems, jokes, and riddles! Prior to initiating this, you should discuss the meaning of a compliment with the entire class.

*ACTIVITY...6...*The concepts of individuality, self-worth and self-confidence, cooperation, and consideration may be reinforced daily by initiating some simple classroom practices.

- Begin the day with "A Thought For the Day." Start the class off with an incomplete statement and have the students share their idea, or thought. Examples: I'd like most to be _________; People seem to think I _________; I wish that school _________.
- At the end of each day, direct the class to sit down and discuss the day's happenings. This is a good opportunity to share feelings with one another. Always wind up the session on a positive note.
- Encourage students to keep a daily journal in which they record their thoughts about the day's events. This is a good means of communication between teacher and student.

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Piaget, Jean. The Moral Judgment of the Child. New York: Free Press, 1965.

We Are Different. Filmstrip, cassette, manual. Albany, NY: New York State Education Department, 1976.

IF I COULD BE

3

OBJECTIVES...to assist children in identifying adult role models...to discuss occupations and personal goals...to record, read, and analyze data using graphs...to recognize and accept individual differences...to suggest some of the personal characteristics in people which are usually associated with success...to learn about success in one field of endeavor, athletics, through an examination of the lives of Olympic competitors...

BACKGROUND...Children spend much time thinking about what they would like to do when they grow up. They often have heroes in real life whose success is a model for them to emulate. Olympic athletes are often these real-life heroes.

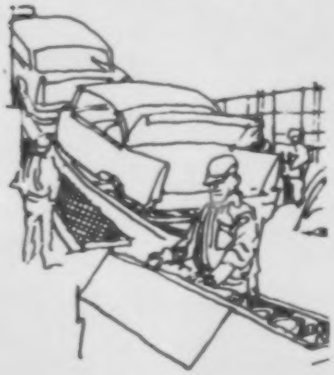
Discussing the lives of these athletes will help children associate specific traits in people which are generally related to success on and off the athletic field. Notable among these traits are ability, desire, sportsmanship, hard work, and conditioning. An effective physical training and sports program can do much in the way of developing such desirable qualities in young people, thus helping them become healthy, happy citizens.

ACTIVITY...1...Discuss with the children the roles of parents, and other young adults, and adults with whom they are familiar. Have the children identify and list the occupation that is one of the roles of each of these persons.

- *Add to your list other occupations that you know about.*

(For younger children...) *Try to find pictures of people performing these jobs and bring them to class.*

Collect all the pictures which have been submitted and display and number them on a large bulletin board. Have each child identify, on a numbered sheet, as many of the displayed occupations as possible. Discuss the occupations.



- *Do we consider athletics as an occupation?* (Paid, professional athletic competition would be an occupation.)

- *Is this occupation shown on the bulletin board? Do many people earn their living this way? Name some people who do.*

- *Prepare a paragraph description of a well-known representative of one of these occupations.*

- *Do Olympic athletes earn a living through athletic competition?* (Explain the difference between amateur and professional.)

- *List five occupations you would be most interested in when you are older. Discuss your reasons for listing them.*

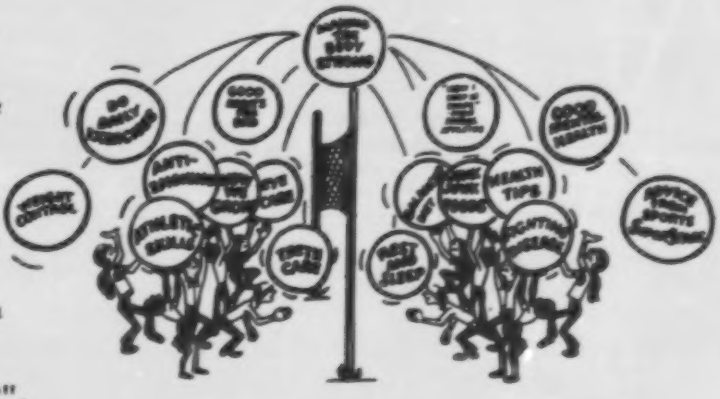
- *What do you think the qualifications might be for these occupations?*

*ACTIVITY...2...*Discuss the qualifications necessary for becoming a successful athlete.

- *What does an athlete look like?*

- *How does one make the body strong?*

- *Discuss the phrase, "sound mind, sound body."*



Circulate among the children a sheet of paper with the heading, "What are the Qualities of a Good Athlete?", asking them to write a one-sentence response.

- *Which qualities necessary for success in athletics are the same as those necessary for success in most occupations?*

*ACTIVITY...3...*Make tagboard cards depicting Olympic events (See page 26.) so that there is one for each child. Pin one of the cards on each child's back. Pair up members of the class. The object of the activity is to have each child guess what event is pinned to his/her back by asking the partner a series of questions. The partner may answer only YES or NO. For example:

- *Is this a summer event?* NO.
- *Does only one person try for the medal?* NO.
- *Is it a team sport?* YES.
- *Is special equipment necessary?* YES.
- *Is it a bobsledding event?* NO.
- *Is it ice hockey?* YES.

Ask the students to list all of the events used in the game. With your help and some reference books, they should match the names of actual competitors with each event.

Each child should then pick one of the athletes from the list...an athlete that he/she would wish to be like. Only you and the child should know which athlete each has selected. Have each child pantomime the appearance (dress; equipment; national costume) or performance of the athlete chosen until the class guesses the athlete's identity.

- *Prepare a brief written report on your event and the prominent athlete associated with it. Remember to include such information as:*
  - *Country represented*
  - *Schooling and training*
  - *Awards and special recognition earned*
  - *Records held*
  - *An interesting anecdote*

*ACTIVITY...4...*Inform the children that "each will soon have the opportunity to meet and interview his/her favorite Olympic athlete."

- *Make a list of the questions you would like to ask.*

- *Put all of your questions together. How many are the same? Make a list of the questions that are appropriate for any of the interviewees.*

The following are some questions framed by third graders for use had they actually been interviewing the athletes indicated.

"How do you skate in front of all those people?" (Dorothy Hamill)
"How do you do what you do?" (Nadia Comeneci)
"How did you get into the Olympics?" (Bruce Jenner)
"Do you like being an amateur?" (Sheila Young)
"When did you start skating?" (Dorothy Hamill)
"Where did you get your running shoes?" (Bruce Jenner)

*ACTIVITY...5...*Poll the class to determine the 10 athletes they like best among the group studied. Divide the class into teams which will conduct surveys of the other classes in school after having made brief presentations about each athlete. The surveys will determine how the 10 athletes should be ranked in a "Favorite Athlete" poll.

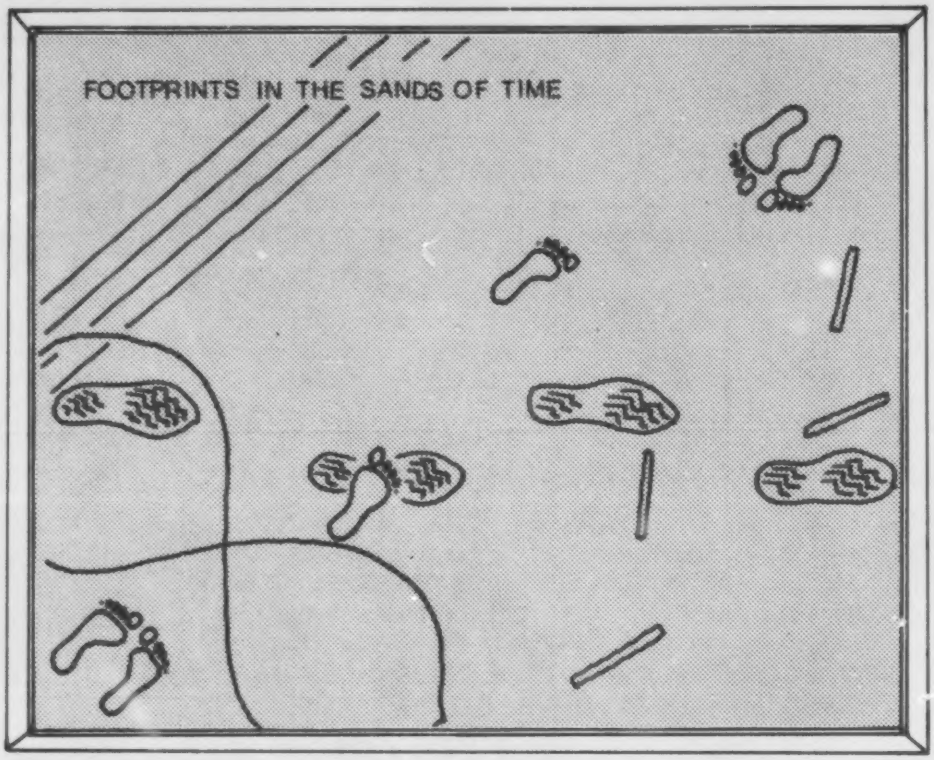
Report on the 10 athletes to each class to which your team is assigned. Poll the students. Total the results and graph the results. Show the results for each class...each grade level...the school. Graph the teachers' choices. If possible, illustrate the graph with a photograph of the athlete.

*ACTIVITY...6...*Suggest that the children search for examples of individuals who have overcome hardship, serious injuries, or handicaps to become well-known, successful members of society. (F. D. Roosevelt, Wilma Rudolph, Helen Keller, Glenn Cunningham, etc.)

*ACTIVITY...7...*Discuss the following quote with the class.

> "If everyone in the world were an athlete, we would have a much better chance for peace. We would break records, not each other's heads." (Vasily Kuznetsov)

*ACTIVITY...8...*Develop a bulletin board display entitled, Footprints in the Sands of Time. The children can make large footprints from construction paper upon which would be printed brief excerpts about the people studied in this unit. The words describing the essential, admirable qualities common to these people would be sprinkled in the "sand" among the footsteps.


FOOTPRINTS IN THE SANDS OF TIME

REFERENCES...

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Durant, John. Highlights of the Olympics: From Ancient Times to the Present. New York: Hastings House, 1977.

Gelman, Steve. Young Olympic Champions. New York: Grosset and Dunlap, 1978.

Hollander, Phyllis. American Women in Sports. New York: Grosset and Dunlap, 1972.

Libby, Bill. Stars of the Olympics. New York: Hawthorne, 1975.

THE OLYMPICS AS HISTORY 3

OBJECTIVES...to understand the meaning of nationalism...to understand that Olympians attend the Games as representatives of their countries and participate as individuals or members of individual teams...to be able to demonstrate that flags are used as symbols for groups or nations...to develop an understanding of sequences of events...to skip count by 4's...

ACTIVITY...*1*...Begin by discussing the meaning of nationalism with the class.

na·tion·al·ism, *n:* loyalty and devotion to a nation...

Recite the pledge of allegiance with the students. Write the words to the pledge on the chalkboard.

- *What do these words mean to you?*

- *Why do we recite this pledge in school?*

- *When do we sing the national anthem? Why do we sing it?*

- *What are some other ways in which we display our loyalty to our nation?*

- *What do we mean when we say that the flag ("Stars and Stripes") is a symbol of our nation?*

- *What are other United States national symbols?* ([bald] eagle; Uncle Sam)

After discussing the meaning of the stars and the stripes on our flag, ask the students to make a small, 8 1/2" x 11" replica of our flag using colored paper, crayons, felt pens, etc.

Show the class pictures of earlier United States flags and discuss the reasons for the different designs and symbols.

ACTIVITY...*2*...Provide the class with wall maps and globes of the world and have five groups draw and label murals of each of the continents. (Use Europe, Asia, Africa, North America, and South America in spite of the explanation on p. 40 .) Explain the meaning of the rings on the Olympic flag.

Draw in the nations found on your continent and label.

Select a country from your continent (one country per child in the group).

Look up this country in the encyclopedia and make notes on area, population, climate, chief products, significant landforms (rivers, mountains, bays, peninsulas, etc.).

Using a pointer, locate your country on the group's mural and briefly describe what you have learned about it.

- *Are there wide variations or extremes in topography or climate in your country as there are in the United States? (Maine vs. Florida; Rockies vs. Plains)*

- *Do these extremes within nations have any effect upon the sports that are popular in your country?*

- *Do such extremes between nations have any bearing on Olympic participation and performance by these nations? Explain.*

- *Match your country with the sport it seems to excel at in the Olympics.*

Make a list of the nations which have hosted the Modern Olympic Games, Winter and Summer, and locate them on the murals. Place the proper Roman numeral and winter/summer designation on the mural. (e.g., I[S] - Athens, 1896; XIV[S] - London, 1948; VI[W] - Oslo, 1952)

Make a flag of "your nation" in the same manner that you made the United States flag.

- *What colors and shapes are used in the flags you have made? Were you able to find out what they symbolized?*

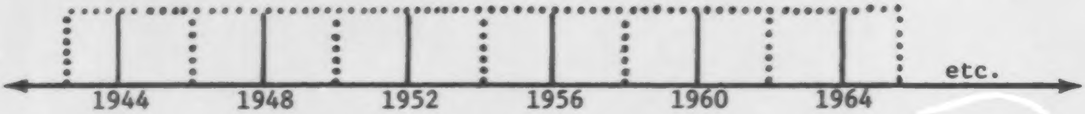
Have the children compile a list of the nations studied and name their capitals. Let them make their own matching test, study for it, take it, and correct the papers.

Hold a spelling bee using the countries and capitals.

Continue the unit with related work on cultures and customs.

ACTIVITY...3...Use a large piece of butcher paper or paper of similar weight and size to cover at least one wall of the classroom. Make a heavy line on the paper with a black felt pen or black yarn about 4 to 5 inches from the bottom of the paper. Divide the line into 27 equal segments that will represent the occurrence of the modern Olympics from 1896 to 2000. Have the students place the dates in each segment, counting by 4's.

Prepare a set of 27 cards which would fit in the spaces created by the demarcation of dates on the (time) line:



Each card would be labeled with a notable Olympic event such as the following:

- Italy wins the 4-man bobsled event.
- Great Britain is the gold medalist in hockey.
- Equestrian events are added.

- Winter Olympics are initiated.
- Competition for women begins.
- The Olympics are held in Athens.
- Dorothy Hamill wins the figure skating gold medal.
- Mark Spitz wins seven gold medals.
- The games are not held in this year.

Draw a card. Determine the date of the event listed on the card and affix the card to the proper place on the timeline.

ACTIVITY...4...Prepare a list of the dates used on the time line and ask the children to name the locations of the summer and winter Olympics for each of the dates on which either or both were held (or are to be held). Each student should then select one of the Olympic cities and write a letter to its Chamber of Commerce or Office of the Mayor, explaining the Olympic timeline / mural project and requesting information about the city (and country). In the case of cities which recently hosted the Olympics, or will soon do so, the children might ask for literature dealing with the event itself. Material collected through this mail solicitation may then be used to adorn the timeline.

Work with the class in preparing a quiz pertaining to the information collected for use with the timeline. Administer the quiz to the class.

ACTIVITY...5...Prepare a worksheet which presents sequential photos from an Olympic event such as the long jump, pole vault, hurdles, etc. (See REFERENCE: Ecker, Tom, et al.) Scramble the order of the photos when duplicating the worksheet.

Cut out the pictures which are on the worksheet and place them in their proper order.

Paste the pictures at the top of a sheet of paper. In the space below the pictures, write a description of the action they show.

ACTIVITY...6...Obtain a large "tree cookie" by inquiring at the county conservationist's office, the regional office of the Environmental Conservation Department, or the local public works office. Sand the specimen carefully and then finish it with a wood preservative. Place small flags or pins denoting each Olympic year and its location on the surface of the "cookie."

Have the students examine the rings evident in this tree slice.

- *Is there evidence of years of drought, disease, fire, and heavy rainfall? Explain.*

- *How old was the tree when it was felled?*

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Roster Packet, XIII Olympic Games (Lake Placid, 1980). St. Louis, MO: Roster Packet, Inc. (7701 Forsythe Blvd., St. Louis, Missouri, 63105).

4-6

4-5 OLYMPIAN CALCULATIONS (II)

OBJECTIVES...to become familiar with, or more proficient in, the use of a calculator...to recognize the value of graphs as tools for presenting information in a format that is easy to understand... to improve information-gathering, reading, and analytic skills through the use of various kinds of graphs...to solve multi-step problems involving money...to use metric units in calculations... to become aware of the time differences (zones) throughout the world...

ACTIVITY...1...The calculator is finding its way into more and more classrooms each year. It is a marvelous tool for introducing math concepts and for computational drills. Begin this unit with the calculator, after instructing students in its care and use.

Do the activities below with the class until the students feel they can do them on their own. Ask them to devise similar riddles and questions.

CONVERSATIONS WITH A CALCULATOR

1. Turn your calculator on and press the keys as follows: 0.7734. Turn your calculator upside down. Greet your calculator.

2. Your calculator does "talk." Read the following incomplete statements about the Olympics. Press the indicated keys and turn your calculator upside down to find the word which will correctly complete the statement.

   - The site of the 1952 Winter Olympics was _______, Norway. Press 0.750 on your calculator to find the answer.
   - The Olympic __________ consists of five intertwined circles which represent the major continents of the world. Press 0.907.
   - We hope that Olympic spectators will not ________ at the Olympic athletes. Press 0.08.
   - An important part of an Olympic runner's anatomy is the __________. Press 937.
   - Jim Thorpe was very __________. Do the following functions with your calculator.

     E (enter) 102
     M (multiply) 9
     = (Press =) ans.

   - Many athletes finish an event with great __________.

     E (enter) 3240
     A (add) 2565
     = (Press =) ans.

3. Make up some completion questions of your own and challenge your classmates.

ACTIVITY...2...Have the students solve the following multi-step problems.

- *Assuming that the cost of a ticket for one person to attend one Olympic event is $25. for adults, and $20. for children, how much will it cost for a family of 4 (2 adults and 2 children) to attend three events?*

- *The ice hockey team's coach is buying equipment for his team. Each new helmet costs $34.95. Each hockey stick is $14.95. Each player will also receive new skates at $42.95. How much will it cost to outfit the team? (What information do you need in order to solve the problem?)*

- *Mr. & Mrs. Johnson are going to take their own car to the perimeter of the Olympic site and then catch a shuttle to the skating arena. The distance from their home to the site is 110 miles. Their car gets 20 miles to a gallon of gas. If gas costs $1.25 per gallon, how much will it cost them to drive to the Olympics and home again?*

ACTIVITY...3...Stage a "calculympics" in the class using several calculator games. (See REFERENCES, page 75.) Form teams among the students and run the calculympics in a manner similar to that of the Olympic Games.

Hold a schoolwide (grades 4 through 6) calculympics. Have your students graph the results.

Encourage students to devise mathematical puzzles, riddles, problems, and calculator activities. These activities and others found through the REFERENCES provided could easily constitute the bases for a school math fair with an Olympic theme.

ACTIVITY...4...Make a list of Olympic events in which times or distances are recorded and used to determine winners. Assign one of these events to each of several small groups within the class. Discuss with the class different types of graphs and which would be most appropriate for the information to be presented.

> *Make a graph of the winning times (or distances) from 1896 to 1976 for the event assigned to your group.* (See the sample graph on the next page.)

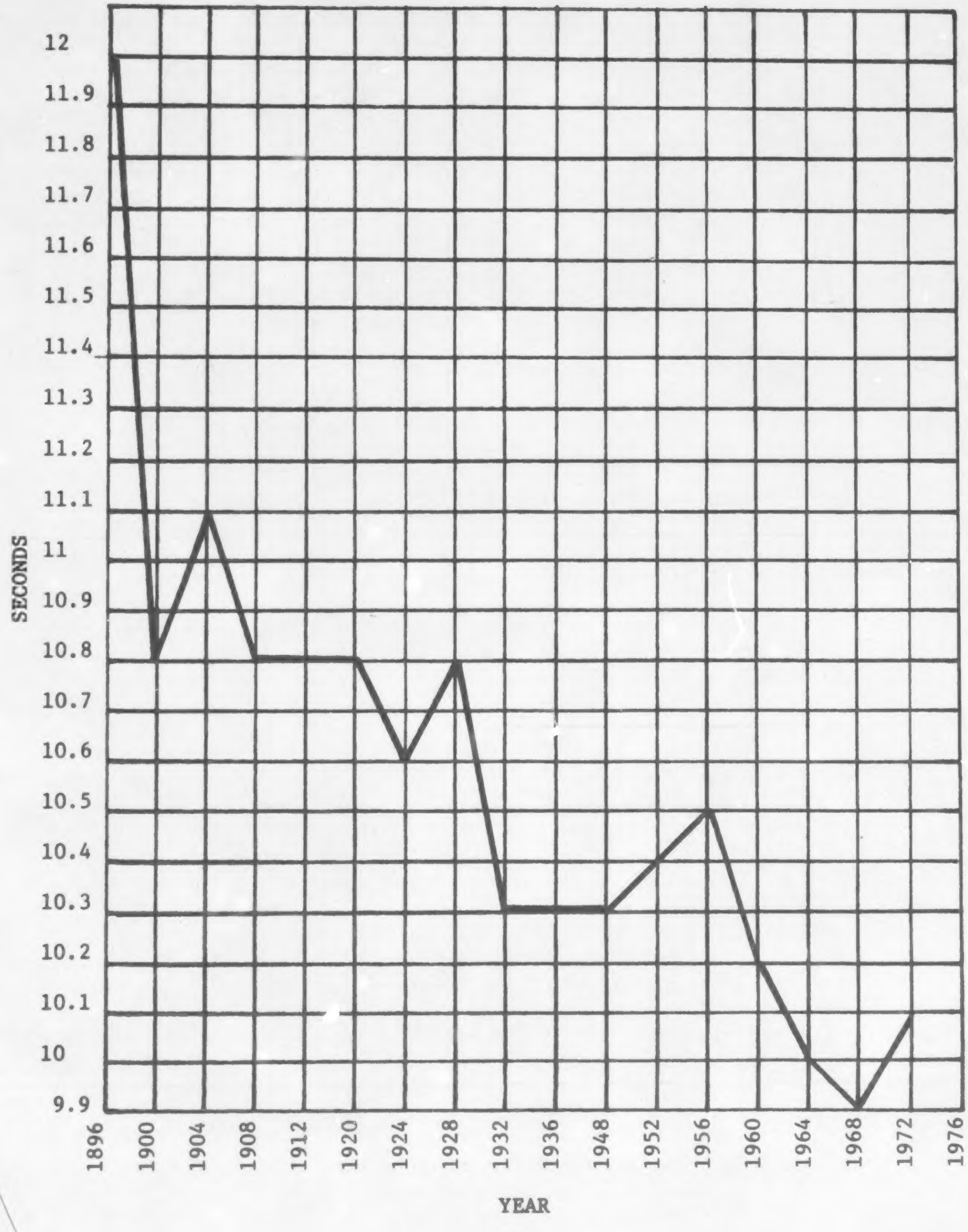
Point out how graphs permit one to visualize trends quickly and easily and how they make information more accessible.

The improvement in Olympic performances over the years, as will be evident from the graphs, should provoke some questions and discussion concerning the reasons for this improvement. Prior to discussing possible reasons, the teacher may ask students to do some research into these areas. Improved equipment (e.g., vaulting poles), better conditions (e.g., tracks, surfaces), and improved coaching and training techniques will be the more obvious reasons that students will discover.

ACTIVITY...5...Help the students construct a time dial.

> *Using a pencil compass, draw a circle with a six-inch diameter on thin cardboard.*

100-METER DASH



Cut out the circle.

Draw a straight line across the circle through the center.

Place a protractor on the line, with the middle of the protractor on the middle of the line.

Make a dot on the cardboard every 15° around the upper edge of the protractor.

Draw a line from each dot through the center of the circle to the edge of the cardboard.

Number the lines with the degrees of longitude.

Cut out a circle with an eight-inch diameter.

Draw lines on this circle as they were done on the six-inch circle.

Number the lines with the A.M. and P.M. hours.

Put the six-inch circle on the eight-inch circle and fasten them together with a paper fastner.

On the six-inch circle, print the names of cities in countries represented in the Olympics at their correct longitudes. Be sure to include Greenwich, England.

Now, by lining up a city with a time, students will be able to read what time it is at that same moment in every other city on the dial. For example, by lining up Lake Placid or Moscow with the time an Olympic event is staged, students can tell what time it is in the home country of any athlete.

Discuss:

- What effect might time difference have on the eating and sleeping habits of the athletes, thereby affecting their performances?
- What problems are there for communication systems such as television in terms of reporting events to the home countries of the athletes because of time differences throughout the world?

REFERENCES...

Judd, Wallace P. Games Calculators Play. New York: Warner Books, 1975.

Schlossberg, Edwin and John Brockman. The Pocket Calculator Game Book. New York: William Morrow and Co., Inc., 1975.

Schlossberg, Edwin and John Brockman. The Pocket Calculator Game Book, #2. New York: William Morrow and Co., Inc., 1975.

Thiagarajan, S. and Harold Stolovitch. Games With the Pocket Calculator. Menlo Park, CA: Dymax, 1976.

4-5 "RUNNIN" HOT AND COLD

OBJECTIVES...to be able to list the 21 summer and eight winter Olympic events...to contrast the summer and winter Olympics in terms of their events, the equipment and clothing used, the participating countries, the climate, and the training required of participants...

ACTIVITY...1...Ask the class to identify and list the events (figure skating, track and field, etc.) of both the summer and winter Olympics. Complete the lists (21-summer, 8-winter) using reference books.

- *Alphabetize the summer and winter lists separately.*

- *Alphabetize all 29 events.*

Ask each student to select one of his/her favorite Olympic sports, either summer or winter, researching that sport in terms of:

- Equipment used
- Training needed
- Clothing worn
- Countries that usually compete in the sport
- Special consideration due to climate

Each student will then create a cartoon character and strip to depict the findings of the research. The cartoons may be dittoed or placed on the overhead projector to accompany an oral report by the student. If practical, a demonstration of the sport, using proper equipment and clothing may be included with the report.

ACTIVITY...2...Help the children prepare and conduct a survey of other classes or the entire school using the following questions:

- *Which Olympic events do you like the most? (Name five, in order.)*

- *Which event do you like the least?*

- *Explain briefly your feelings.*

- *Do you prefer the Summer or the Winter Games?*

Show the children how to weight the responses, rank the results, and display them in chart or graph form for all schoolchildren to see. Devise, with your class, a series of questions to accompany the chart/graph such as:

- *How many people voted for the "most popular" event?*

- *How many of the 21 summer and eight winter events were selected by someone?*

*ACTIVITY...3...*Statistics concerning the summer and winter Olympic events can be interesting. Using a variety of books on the events and records of the Olympic Games, divide the class into groups assigned to investigate the following questions:

- *Which has more participants and spectators - the summer or winter Olympics? (Cite figures from several Olympics to support your answer.)*
- *How many team events are held for the summer and winter Olympic Games? (List separately.)*
- *Which countries do not participate in the winter Olympics and why?*

Using desk outline maps of the world, have the class identify the countries which participate in the summer and winter Olympics. Use appropriate symbols for summer (e.g., sun) and winter (e.g., snow crystal).

- *Find the numbers of male and female participants for both the summer and winter Games in any two Olympic years.*
- *What sports were listed on official programs in the past but are not now officially recognized as events? (Check both summer and winter Olympics.)*
- *What training techniques are used by athletes in both the summer and winter events?*
- *Are there any training techniques needed for the summer Olympics and not the winter and vice versa?*

*ACTIVITY...4...*Reproduce and distribute copies of the word jumbles on the following page. Encourage the students to solve these and think about similar jumbles they can create themselves.

*ACTIVITY...5...*Ask each student to pick one favorite winter Olympic sport and one favorite summer Olympic sport. Select features of each of the favorites to "invent" a new sport. Give this new sport a name and a set of rules.

- *What equipment will be used in this "new" sport?*
- *What clothing will be worn?*

Design a poster announcing this new sport and use it to illustrate an oral report on your "invented" sport.

REFERENCES...

Durant, John. Highlights of the Olympics: From Ancient Times to the Present. New York: Hastings House, 1977.

Kamper, Erich. Encyclopedia of the Olympic Records. New York: Bantom Books, 1977.

Killanin, Lord and John Rodda. The Olympic Games: 80 Years of People, Events, and Records. New York: Macmillan, 1976.

JUMBLES

Directions: Unscramble these jumbles to form ordinary words which refer to the Olympics.

Summer	Winter
remham ☐ ☐ ○ M ☐ ☐	bsolbde ☐ O ☐ ○ ○ ☐ ☐
rwaor ☐ ☐ ☐ ○ W	siks ○ ☐ ☐ ☐
naeco ☐ ☐ ○ O ☐	tkssea ☐ ☐ ☐ ☐ ○ ○
dadlse S ☐ ☐ ☐ ☐ ☐	cukp ○ ☐ C ☐
iceybcl ☐ ☐ ○ ○ ☐ L ☐	filre ☐ ☐ ☐ ○ ☐
vleniaj ☐ ○ V ☐ ○ ☐ ☐	seopl ☐ ○ ☐ ☐ S
ssiucd ☐ ○ ☐ ☐ ☐ ☐	glue L ☐ ○ ☐

Now arrange the circled letters to form the theme words below.

1984 - Sarajevo/ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

OLYMPIAN CALCULATIONS (III)

4 - 5

OBJECTIVES...to solve word problems which have either too little or too much information...to solve one- and two-step word problems involving money...

ACTIVITY...1...Many times we are not provided with enough information to solve a problem. Give your students problems similar to those below and have them supply the missing information and solve.

- *The Sacca family will be attending the Los Angeles Olympics. They wish to see the pole vault event. Tickets for adults cost $40.00 each, while those for children are $32.00 each. How much will it cost for the Saccas to watch the pole vault?* __________. (Determine, arbitrarily, the number of children and the number of adults in the Sacca family.)

- *The 5000-meter speed skating gold medal was won by a Norwegian in 1928 with a record time of 8 minutes, 50.5 seconds. In 1980, an American won this event in record time. What was the difference between these two records?* __________. (Look up Eric Heiden's record time.)

- *Many spectators must travel by bus to reach the Olympic Games site. If a spectator lives 125 miles from the site, how long will it take him to get there?* __________. (Assume an average speed of 50 or 55 miles per hour.)

- *Mr. Feldman spent $120.00 for tickets to an Olympic basketball game. He bought three children's tickets and two adult tickets. How much did he pay for the three children's tickets?* __________. (You must assign a cost to the adult tickets.)

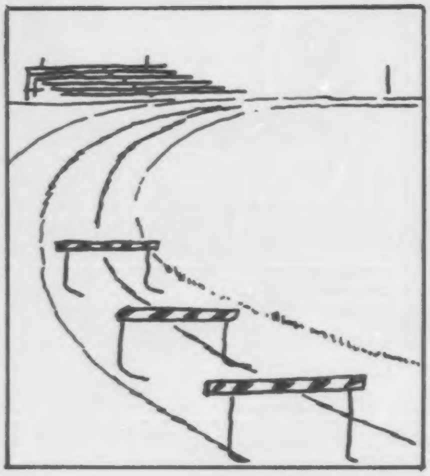
At other times, we are given too much information in word problems. Provide the class with problems similar to those below, asking them to cross out the superfluous information and to solve.

- *Joe Pierce wishes to arrive at the Olympic ticket office by 1:00 p.m. He awoke at 7:00 a.m. If it takes 2 1/2 hours to drive from his home to the ticket office, at what time must he leave in order to arrive at 1:00 p.m.?* __________.
(...~~7:00 a.m.~~ ...)

- *The Olympics are held every four years. In 1900, the Summer Games were held in Paris, France. They were held again in Paris in 1924. How many years were there between the two occasions when Paris was the site?* __________.
(...~~every four years~~...)

- *In the Women's 10 km Cross Country Nordic Skiing event, a Finnish athlete took the gold in 1952 with a time of*

41:40.00. In 1972, a Russian woman won the gold with a time of 34:17.82. The current Olympic record for this event is 29:30.00. How much difference is there between the Finn's time and the Russian's time? (...~~current Olympic record~~...~~is 29:30.00~~...)



- In 1932, Babe Didrikson won the gold medal in the hurdles with a time of 11.7 seconds. She ran the 80-meter hurdles in record time. In 1964, a German woman won the gold with a time of 10.5 seconds. What was the difference in time from 1932 to 1964? __________. (...~~record time~~...)
- Approximately 100,000 people are expected to attend the 1984 Olympic Games in Los Angeles. Of these, about 75,000 are expected to need transportation from the parking lots to the individual events. This one-way trip from lot to event will take 15 minutes. If each bus holds 60 people, how many trips will be needed to move these people from the lots to the events? __________. (...~~100,000~~...and...~~15 minutes~~...)

Ask the students to devise similar problems of their own for their classmates to solve.

ACTIVITY...2...Make and duplicate for the class a worksheet using the following word problems. See also the "answer sheet" exercise which follows the problems.

1) An Olympic pin costs $2.25 including tax. How much would three pins cost? 1) ($6.75)

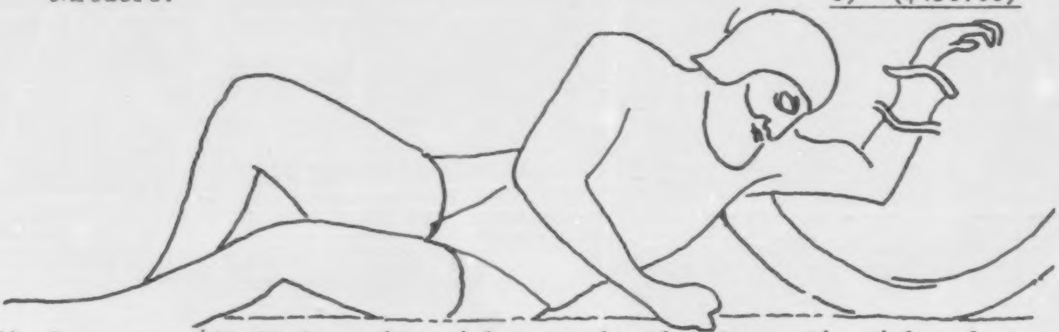
2) Joan spent $24.80 for four meals during her stay at the Olympics. What was the average price for each meal? 2) ($6.20)

3) The Gonzalez family bought two adult and two children's tickets to the featherweight class boxing event. The adult tickets cost $15.00 each and the children's tickets cost $10.00 each. How much did they spend for all four tickets? 3) ($50.00)

4) Tim bought some Olympic souvenirs for his friends. He bought a key chain for $1.50, an Olympic patch for $1.75, an Olympic T-shirt for $4.50, and an Olympic coloring book for $1.65. How much change did he receive from $10.00? 4) ($.60)

5) Sue has $210.00 for the purchase of seven ice hockey tickets. How much does each cost? 5) ($30.00)

6) It costs $150.00 to outfit one Olympic discus thrower with uniform and equipment. How much would it cost for three discus throwers?
6) ($450.00)



7) Dan spent $10.85 for a bus ticket to the Olympics. His ticket for a swimming event cost $25.00 and his meals for the day cost $9.45. How much money did he spend?
7) ($45.30)

8) A souvenir salesman sold 14 Olympic pins at $2.00, four Olympic pens at $1.25, six Olympic T-shirts at $5.00, 10 balloons at $.65, and five Olympic glasses at $2.30 in one hour. How much did he take in?
8) ($81.00)

9) If that souvenir salesman (above) paid $52.25 for the merchandise, what was his profit?
9) ($28.75)

10) If Marie spent $3.50 each day for lunch at the Olympics, how much did she spend on lunch in four days?
10) ($14.00)

11) A family of five spent $94.00 for a motel at the Olympics for one night. How much would it cost to stay for three nights?
11) ($282.00)

12) How much does it cost each member of that family of five (above) to spend one night at the motel?
12) ($18.80)

13) A tourist spent $21.50 for a ticket to the figure skating event. How much would five tickets cost?
13) ($107.50)

14) The bus driver who drove a bus full of people to the diving events collected 12 children's fares at $1.60 and 45 adult fares at $2.30. How much money did he collect in all?
14) ($122.70)

15) A customer at the Olympic Torch Restaurant spent $38.40 for dinner and added a $4.00 tip. How much change did he get from a $50.00 bill?
15) ($7.60)

16) Lesa had to buy new mittens at $3.50, a new scarf at $11.20, and a new hat at $9.50 in order to attend the Olympic Winter games. How much did she spend in all?
16) ($24.20)

Ask the students to place the answers to the problems in order, from smallest amount to largest, with the number of the answer next to each answer.

SMALLEST

	Amt.	No.	
			= a
EX.	$6.20	2	= b
			= e
			= g
			= h
			= i
			= k
			= m

	Amt.	No.	
			= n
			= o
			= p
			= r
			= s
			= t
			= u
EX.	$450.00	6	= w

LARGEST

Call attention to the fact that each answer number is paired with a letter. Students should place the appropriate letters over the numbers in the puzzle below to reveal a quote from Pierre de Coubertin, father of the Modern Olympic Games.

" 14 10 1 | 12 9 3 7 8 14 4 5 14

14 10 12 5 15 | 12 13 | 5 7 14

14 7 | 6 12 5 | 2 11 14

14 7 | 14 4 16 1 | 3 4 8 14 ."

Baron Pierre de Coubertin

OLYMPIC "GAMES"

4-6

OBJECTIVES...to learn about the Olympics through the experiences of famous Olympians...to build on language arts skills (dictionary, vocabulary, outlining, alphabetizing)...

ACTIVITY...1...Read the six short stories about famous American Olympians in Ann Finlayson's book, Stars of the Modern Olympics, to/with the class. Discuss the early lives of the athletes, comparing their beginnings in sports.

- *Describe the accomplishments of these Olympians.*
- *Why was each a true Olympic champion?*
- *How did their personality traits help them become famous Olympians?*

Write about the athlete that you liked best and explain why.

Discover a present-day Olympian (or potential Olympian who is similar to the one you wrote about. Study that athlete's background and prepare a brief report for presentation to the class.)

ACTIVITY...2...Discuss the meaning of the concepts, concrete and abstract, with the class. Provide the students with the following vocabulary words which were selected from the book used in the first activity:

spirit, ambition, javelin, postman, respect, swimmer, apple, humble, athlete, persistence, endurance, honor, football, hurdle, lap, pentathlon, proud, admire, decathlon, track, pool, determination, flutter kick, Olympic record, shotput, courage, Olympic medal, character, Olympic Games.

Classify the vocabulary words into the two categories, concrete and abstract.

Alphabetize the words in each category.

Choose 10 of the words and complete the dictionary exercise chart:

WORD	GUIDE WORDS	SYLLABLES	DEFINITION
1. ambition	ambassadress -	am/bi/tion	ardent desire for rank, fame, or power
2.			
3.			
etc.			

Using words from the original vocabulary list, make a puzzle for the rest of the class. Some suggestions are:

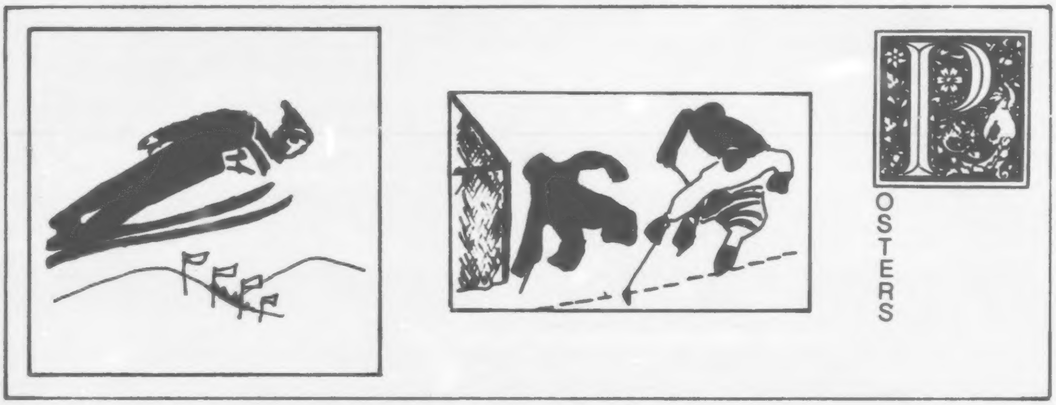
- *crossword puzzle*
- *jumble*
- *matching word and definition*

ACTIVITY...3...Provide the students with copies of the activity, "Olympic Short Vowel Hunt" on the next page. The class may also devise additional short or long vowel hunt games by using the names of Olympic participants, participating nations, Olympic sites, or other Olympic vocabulary words.

Select some of the words used in the activity and use them in a brief, fictional account of an Olympic event or occurrence.

RELATED ACTIVITIES...

1...Compile a classroom collection of articles, books, posters, and memorabilia relating to the Olympic games. Develop with the class an index of subheadings as a reference to the collection.



2...Include at least one Olympic reading assignment among the year's literature reporting activities.

REFERENCES...

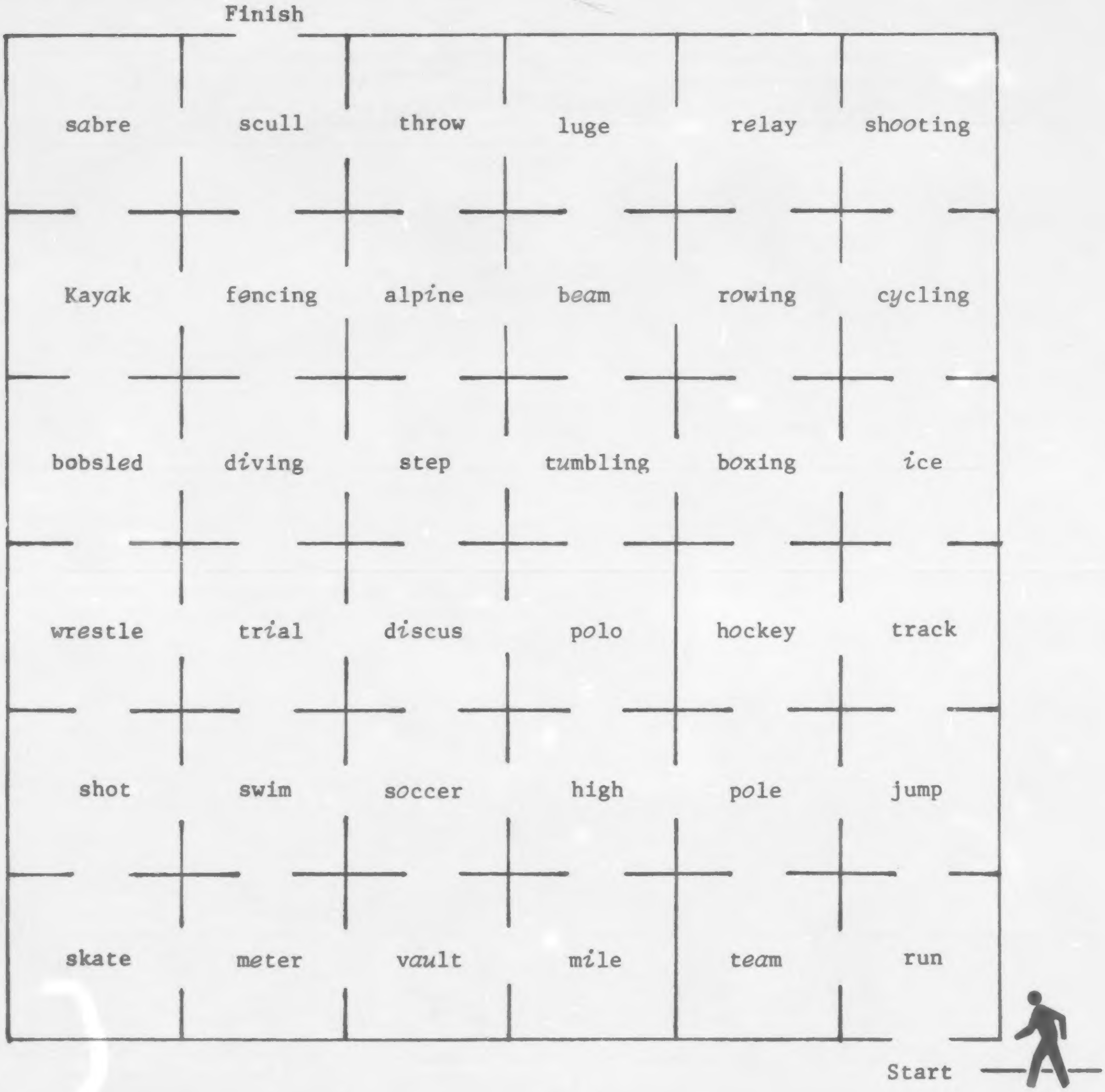
Finlayson, Ann. Decathlon Men. New York: Garrard Publishing, 1966.

Finlayson, Ann. Stars of the Modern Olympics. New York: Garrard Publishing, 1966.

Libby, Bill. Stars of the Olympics. New Canaan, CT: Hawthorne Books, Inc., 1975.

United States Olympic Committee. The Olympic Games (pamphlet). New York: Olympic House, 1970.

OLYMPIC SHORT VOWEL HUNT



s*a*bre	scull	throw	luge	r*e*lay	sh*oo*ting
Kay*a*k	f*e*ncing	alp*i*ne	b*ea*m	r*o*wing	c*y*cling
bobsl*e*d	d*i*ving	step	t*u*mbling	b*o*xing	*i*ce
wr*e*stle	tr*i*al	d*i*scus	p*o*lo	h*o*ckey	track
shot	swim	s*o*ccer	high	p*o*le	jump
skate	m*e*ter	v*au*lt	m*i*le	t*ea*m	run

Directions: *Some of the Olympic words have short vowels. Help Ollie Olympian run through the maze to win the race. He can only run through the boxes with short vowels to get to the finish. Sound out the words carefully as you go. If a word has more than one vowel, the italic one is the one you use.*

4-6 GYMNASTICS AND POETRY

OBJECTIVES...to understand movement (in gymnastics) as aesthetics... to relate the aesthetics of gymnastics to other areas of the arts such as language arts (poetry) and music...

NOTE...This unit will be most effective if it is preceded by a brief consultation among the regular classroom teacher, the music teacher, and the physical education instructor. The unit's basic objective may be construed as relating the gymnastics portion of the physical education program to activities of the Olympic Games while demonstrating the interrelationship of both to the arts.

ACTIVITY...*1*...Coordinate the development of final routines in the gymnastics unit with the conclusion of the study of various poetic forms in the regular instructional program.

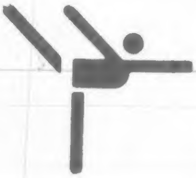
<table>
<tr><th>Physical Education - Gymnastics</th><th>Language Arts - Poetry</th><th>Music/Art</th></tr>
<tr><td rowspan="2">After the children have mastered skills in each gymnastics area, ask each to develop a routine in one specific area.</td><td>Once various poetic forms have been studied, discuss the structure of an</td><td></td></tr>
<tr><td colspan="2">acrostic: <i>a composition, usually in verse, in which sets of letters (as the initial or final letters of the lines) taken in order form a word or phrase or a regular alphabetical sequence.</i></td></tr>
<tr><td>Ask the students to refine the poems to achieve coordination between the words (cadence) and their own physical abilities.</td><td>Assign the word OLYMPICS as the set of letters for the acrostic and have the children develop poems dealing with gymnastics. (See examples on the next page.</td><td rowspan="2">Posters bearing the acrostics may be designed for hanging in the gymnasium and the classroom.
Children may wish to select musical recordings to accompany the routines. Where Orff instruments are available, children may plan their own accompaniment.</td></tr>
<tr><td colspan="2">Using the acrostic and gymnastics routine matchups, plan a finale for the gymnastics unit which will also serve as an "enhanced" poetry reading.</td></tr>
</table>

Discuss the components of a gymnastics routine: skill; fluidity; rhythm; balance; harmony; coordination. Point out that many of these are also components of art, music, and poetry.

OLYMPIC ACROSTICS

O Olga Korbit
L Leaps and layouts
Y You can do it
M Millcircles are wayout
P Pyramids and pushups
I It is really fun
C cartwheels and walkovers
S sommersaults one by one. (sic)

On the balance beam
Leaping and jumping
You can do it too
Many hours of practice
Practice makes perfect
It can be fun
Come on and try it
Swinging from the parrallel bars (sic)



ACTIVITY...2...Encourage high quality performance by the children both in writing the acrostics and in developing routines. Invite parents as well as other students and teachers to attend the finale.

ACTIVITY...3...Record the youngsters' efforts on tape and film.

ACTIVITY...4...Obtain a film portraying gymnastic competition in the Olympics. Discuss the standards for gymnastic competition at this level.

4-6 FITNESS OLYMPICS

OBJECTIVES...to simulate an Olympiad by substituting the New York State Physical Fitness Screening Test* for Olympic events...to learn, through this simulation, that the Olympics themselves are the pinnacle of what should be a broad, stimulating program for providing physical training, fitness, and competition with opportunities for people at all ability levels...to demonstrate the additional learning opportunities available in other subject areas, such as mathematics, art, and language arts, by staging a fitness olympics...(See Bibliography.)

ACTIVITY...1...Develop a mini-Olympics or fitness Olympics for the physical education class using the tests in the New York State Physical Fitness Screening Test* as the four areas of competition, and following the procedures below.

Pretest all children in the physical education class by administering the N.Y.S.P.F.S.T. Record all scores.

Divide the class into two groups (e.g., Athens and Sparta).

Over a period of a month or more, use the four tests as warmup activities for the class. Encourage the children to practice these exercises frequently, away from school.

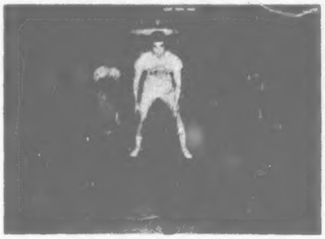
Retest all children. Select the top performers (two boys; two girls) in each test from each group (Athens and Sparta). (You may wish to select some alternates as well.)

NOTE: To increase the number of competitors throughout, limit any child's participation to one event. Record test scores throughout the competition's stages.

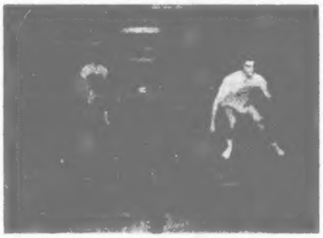
Continue to encourage these semifinalists and all others to continue practicing on their own. Continue to use the tests as class warmup exercises.

Several weeks later, administer the N.Y.S.P.F.S.T. to each team's four semifinalists (two girls and two boys) for each "event."

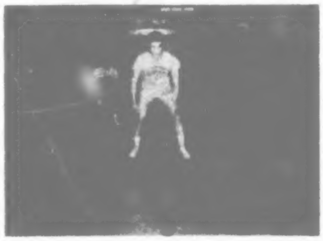
The Agility Test



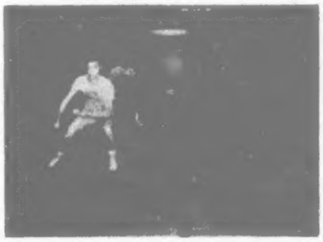
a. Starting position



b. Sidestep to left across left outside line



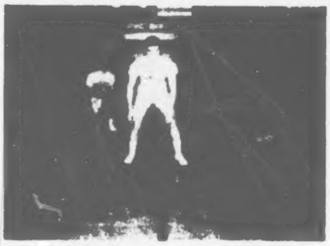
c. Sidestep to right across center line



d. Sidestep to right across right outside line

*(or a similar test)

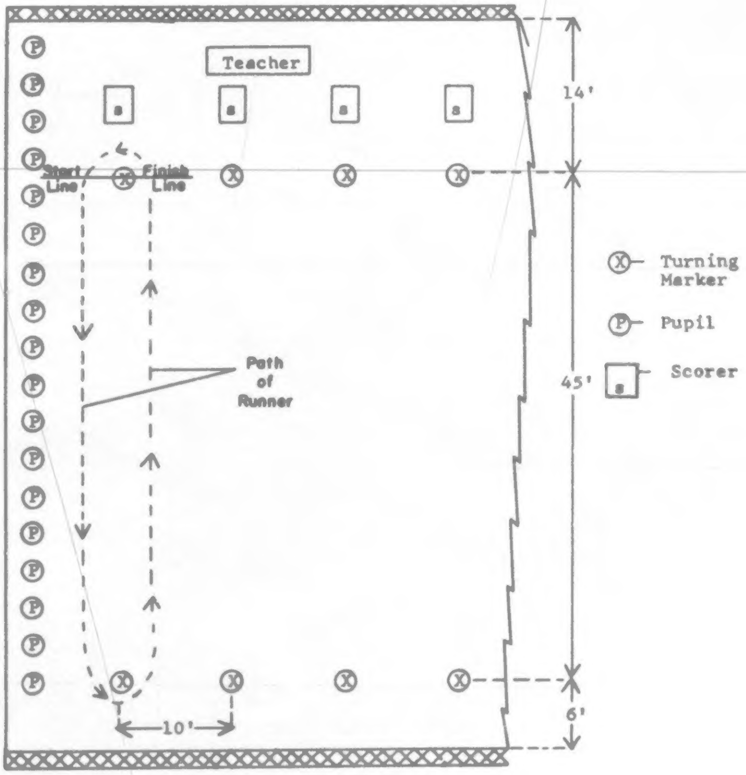
Shortly thereafter, stage the final competition pitting a girl and a boy from Athens against a girl and a boy from Sparta in each of the four tests, producing four winning girls and four winning boys. In the event there are four winners from both Athens and Sparta, use the performance figures to break the deadlock.



e. Sidestep to left across center line

	Athens		Sparta	Total # of students
Based upon scores, select:				
Qualifying	2 girls, 2 boys for each of 4 events (16)	(+)	2 girls, 2 boys for each of 4 events (16)	= 32
Semi-Finals	1 girl, 1 boy for each of 4 events (8)	(+)	1 girl, 1 boy for each of 4 events (8)	= 16
Finals	1 team winner (girl) and 1 team winner (boy) for each event			= 8

The Speed Test


Teacher
s
Start Line
Finish Line
Path of Runner
14'
45'
6'
10'
Turning Marker
Pupil
Scorer

ACTIVITY...2...With the cooperation of the classroom teacher, develop the following activities for the students in relation to the various stages of competition.

Learn to use a stopwatch and assist in timing all four tests (agility, strength, speed, endurance).

Measure the station intervals for the speed test.

Submit ideas in a contest for choosing team nicknames.

Write a cheer for each team.

Design medals or tokens which can be awarded to the winners of each event.

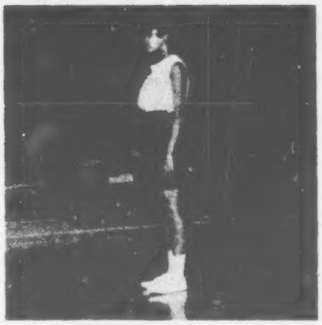
ACTIVITY...3...For the duration of the unit, each child should keep a log in which would be recorded:

- Length of individual practice sessions and scores
- Personal feelings as each new level of competition approaches
- Personal feelings after winning or losing each new level of competition (including fears)
- Feelings about self and others who have been eliminated
- Anecdotal record of encouragement and support given and received from group members, opponents, parents, and teachers.

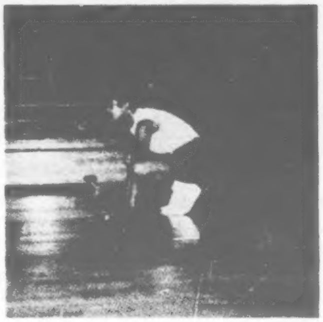
Discuss these observations of self-awareness in small-group sharing sessions after the competition is concluded and the logs are complete. Each group should have at least one member of the winning team, one member of the losing team, and at least two spectators from each group.

- *Talk about the things which, during the preparation and the competitions themselves, gave you positive feelings...negative feelings.*
- *Discuss how what we do and say and how we do and say these things can affect the feelings of others.*

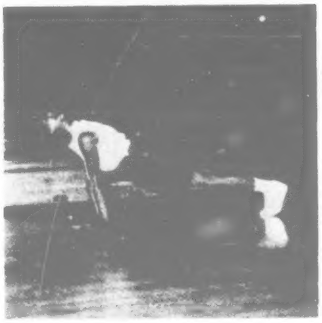
The Endurance Test



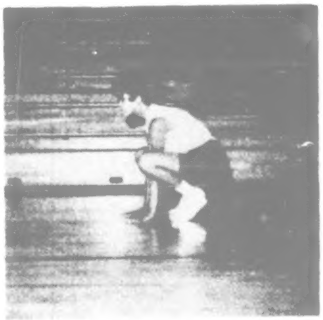
a. Starting position



b. Squat position



c. Legs back position



d. Return to squat position

- *Sum up your feelings in this regard by writing a composition entitled, "The Thrill of Victory and the Agony of Defeat."*

ACTIVITY...4...A range of mathematics activities may be derived from the competition, from making individual graphs of performance statistics to tabulating total class or school results on display charts.

Record each of your test scores and construct a bar graph or a line graph for each test to illustrate changes in your performance.

Using your graphs, explain to the class how your performance changed from one testing period to another.

Assign a committee to calculate class average test scores for each test and construct a large poster illustrating the changes in the form of a graph. This would be an excellent opportunity for students who are learning to work with calculators. (See p. 72.) Consider making this an annual event with yearly records maintained and comparisons made.

Use the individual and composite statistics as an opportunity for the children to work with percentages.

- *What percentage of your classmates showed an improved total fitness score?*

- *Did most of the improvement occur during the second testing? Explain?*

- *What percentage of the class showed no improvement?*

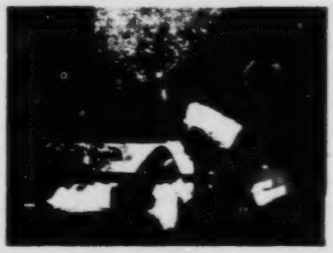
Continue the exercise with percentages by working with individual comparisons; girl-boy comparisons; highest-lowest comparisons; etc.

e. Return to starting position

The Strength Test

a. Starting position

b. Elbows to knees



c. Return to starting position

4-6 CALORIES COUNT

OBJECTIVES...to understand the basic meaning of a Calorie...to learn how to determine mass (weight) in kilograms...to calculate the number of Calories expended by individuals during participation in athletics...to use the four basic mathematics operations, and decimals, and metric measurement...to learn about the Caloric intake of people of other nations...

BACKGROUND...When an athlete performs, Calories count a lot. The competitor does not want to be bothered thinking of Caloric intake or output during a sprint or a long distance race, but the energy contained in foods and the energy required by various forms of physical activity are critical and can be measured. Generally speaking, the more strenuous and demanding an event, the greater the energy requirement. However, other factors influence an athlete's Caloric output, such as the duration of time and the individual's size. Students should be provided an opportunity to investigate the relationship of Calories to physical exercise in this unit so that they can better appreciate the complexity of their own physical activities and those of Olympic competitors.

ACTIVITY...1...Explain to the students the basic meaning of a Calorie (food Calorie).

> The food Calorie, or nutritional Calorie, is a heat unit which measures energy value, one food Calorie being the amount of heat required to raise the temperature of 1,000 grams, or 1 kilogram (the mass of one liter), of water 1 Celsius degree. (NOTE: This amount of heat is 1,000 times greater than the "small" calorie used by the physical scientist.)

They should learn that the Calorie is used to measure the amount of energy that the body can get from food (Caloric intake). It is also used to measure how much energy the body uses up during a particular activity — running, sleeping, swimming, walking, even thinking (Caloric output).

The Caloric value of a measured amount of food is determined with a calorimeter. Special metabolic equipment is used to rate the Caloric consumption that takes place during a specific type of physical activity or athletic event.

ACTIVITY...2...Prepare an overhead projection transparency and provide the students with a handout of the chart on the next page. (Data derived from Larson, L., and Michelman, H. *International Guide to Fitness and Health*. New York: Crown Publications, 1973.)

CALORIES USED UP BY A 150-POUND MAN (68 kg)

Activity	Calories Per Hour	Calories Per Minute
bicycling (10 mph)	420	7.0
bowling	270	4.5
ice skating, leisurely	300	5.0
jumping rope	750	12.5
mountain climbing	600	10.0
playing golf	270	4.5
playing pool	120	2.0
raquetball	540	6.0
running (7.5 mph)	750	12.5
sitting	100	1.7
sleeping	80	1.3
snowshoeing (3 mph)	360	6.0
standing	140	2.3
swimming, recreational	600	10.0
walking on level	360	6.0
walking up stairs	1050	17.5
waterskiing	390	6.5

- *Which activity requires the least number of Calories per hour? the greatest?*
- *Does it take more energy to swim or to ice skate? bowl or jump rope? Explain why.*
- *If you weigh 75 pounds (34 kilograms), how many Calories would you expend skiing for one hour?* (Hint: 75 lbs is 50% of 150 lbs)
- *Should your answer be greater or less than the number on the chart? Explain your answer.*
- *How many total Calories will a 150-pound (68 kg) bicyclist consume if he/she rides for 4 hours at a steady speed of 10 mph?*
- *What factors determine the number of Calories required for a specific exercise or activity?*
- *Where does the energy (Calories) come from to perform the activities listed above?*

ACTIVITY...3...The students should be ready to calculate the number of Calories or the amount of energy necessary to participate in a specific Olympic event. First of all, provide them with copies of the chart below and ask them to study it carefully.

Event	Calories Used Up For Each *Kilogram* of Body Weight For *One Hour**	Calories Used Up For Each *Kilogram* of Body Weight For *One Minute**
Backstroke, swimming	9.0	.15
Bicycle racing	10.2	.17
Boxing	13.8	.23
Butterfly, swimming	11.4	.19
Cross-country skiing	12.0	.20
Equestrian event (horseback)	9.0	.15
Figure skating	11.4	.19
Freestyle, swimming	10.8	.18
Gymnastics, balance beam	6.6	.10
Gymnastics, parallel bars	9.0	.15
High jumping	10.8	.18
Karate	7.8	.13
Long distance running	10.8	.18
Long jumping	19.2	.32
Slalom skiing	10.0	.17
Sprint running	19.8	.33

A review of the multiplication of decimal numbers and metric measurement might be appropriate at this point.

Working in pairs, use the following sample problems to establish a procedure for determining the Caloric output of a specific event.

(1) How many Calories does a 150-pound man expend when he completes the marathon run in 2 1/4 hours?

Solution. Use the formula:

$$\text{Calories Used Up in Event} = \text{Number of Calories needed for } \underline{\text{one}} \text{ kilogram of body weight for one hour} \times \text{Total number of kilograms of body weight} \times \text{Total number of hours}$$

$$= \underset{\text{(See chart.)}}{10.8 \text{ Cal/kg/hr}} \times \underset{(1 \text{ kg} = 2.2 \text{ lb})}{\frac{150 \text{ lb}}{2.2 \text{ lb}}} \times \underset{\text{(Convert fraction to decimal.)}}{2.25 \text{ hr}}$$

$$= 10.8 \times 68 \times 2.25$$

$$= 1652 \text{ Calories}$$

(Round off answer to nearest whole number.)

---

*The chart data is based on conversions and estimates derived from charts in The International Guide to Fitness and Health. Actual Caloric requirements for competitive Olympic activities would most probably be higher.

(2) How many Calories does a 110-pound woman use up when she performs on the uneven parallel bars for one minute?

Solution. Use the formula:

$$\text{Calories Used Up in Event} = \text{Number of Calories needed for } \underline{\text{one}} \text{ kilogram of body weight for one minute} \times \text{Total number of kilograms of body weight} \times \text{Total number of minutes}$$

$$= .15 \text{ Cal/kg/min.} \times \frac{110 \text{ lb}}{2.2 \text{ lb}} \times 1.0 \text{ min.}$$

$$= .15 \times 50 \times 1.0$$

$$= 7.5 \text{ Calories}$$

*ACTIVITY...4...*Have the student pairs solve the problems below using the procedure from above. Apply the following "reward" scheme to the results obtained by each pair of students.

Number Correct	Status Award
5	Gold Medal
4	Silver Medal
3	Bronze Medal
0-2	Need More Practice

(1) How many Calories are needed by a 198-pound (90 kg) boxer who fights in a heavyweight match for 30 minutes? (621 Calories)

(2) A skier races against the clock in the giant slalom event. Calculate the number of Calories used up by this 75-kilogram competitor. Time: 1 1/2 minutes. (19 Calories)

(3) Calculate the Calories used up by a 110-pound (50 kg) freestyle swimmer who wins the 400-meter event in 4 minutes flat. (37 Calories)

(4) Find out the Calories needed by a skier weighing 60 kilograms to win the 10 kilometer cross-country race in 50 minutes. (600 Calories)

(5) A figure skater of 121 pounds (55 kg) practices for her performance for 2 exhausting hours. What was her Caloric output for that period of time? (1254 Calories)

ACTIVITY...5...Devise a Calorie counter worksheet for the students, or use the sample on page 97. Ask them to record their Caloric intake for a period of several days. Food values (in Calories) may be found in standard references such as encyclopedias or almanacs.

Using reference materials (almanac, Population Reference Bureau materials, etc.) determine average Caloric intake for regions/nations of the world. Make a color key from the information below and use it with an outline map of the world. (See sample on page 98.)

- *Starvation - fewer than 1500 Calories/person/day*
- *Potential starvation - 1500 to 1900 Calories/person/day*
- *Adequate - 1900 to 2300 Calories/person/day*
- *More than adequate - more than 2300 Calories/person/day*

Prepare a worksheet similar to THE FOOD CRISIS on page 99 and discuss the problems of world food supply with the class.

Based upon what the students have learned about Caloric output and physical activity and about Caloric intake throughout the world, make the observation that many of these low, average Caloric intake areas and countries are represented at the Olympic Games. Discuss.

- *Could Olympic athletes from these impoverished nations compete effectively if they consumed only as many food Calories as the average indicated for their countrymen? Explain.*

- *Compare the level of Caloric intake in the United States with that of some of the other areas. Write a brief essay supporting your opinion as to whether or not we have a responsibility to nations with food supply problems.*

ACTIVITY...6...Develop additional work problems similar to those in Activity 4, using data from the "Event" chart in Activity 3.

Have the students substitute their own weight for the 150 pounds (68 kg) given in Activity 3 and make the appropriate change in Caloric values in both columns (per hour; per minute).

REFERENCES...

Larson, Leonard and Herbert Michelmen. International Guide to Fitness and Health. New York: Crown Publications, 1973.

Mirkin, Gabe and Marshall Hoffman. The Sports Medicine Book. Boston: Little, Brown, 1978.

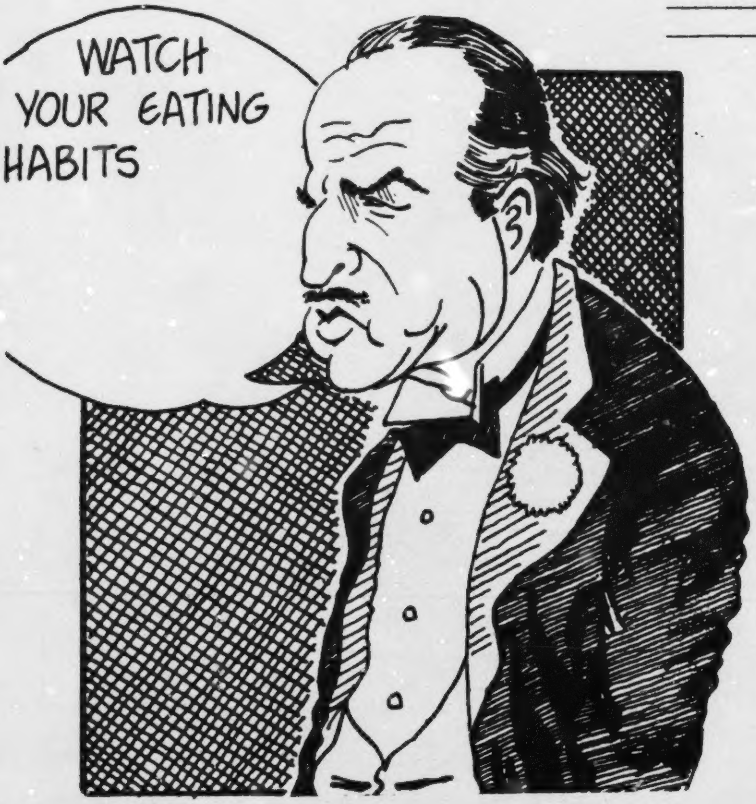
"Running Out of Food," Newsweek, November 11, 1974, pp. 56-68.

"World Food Crisis," Time, November 11, 1974, pp. 66-83.

the CALORIE COUNTER

	AMOUNT	AVERAGE CALORIES
American cheese	1½ oz.	110
Angel cake	2 oz.	150
Apple	1 med.	80
Apple juice	½ c.	60
Applesauce	½ c.	115
Apricots		
Asparagus		
Bacon, crisp		
Baked beans		
Banana		
Bean sprouts		
Beans, green		
Beef, lean		
Beef potpie		
Beef steak		
Beets		
Biscuits		

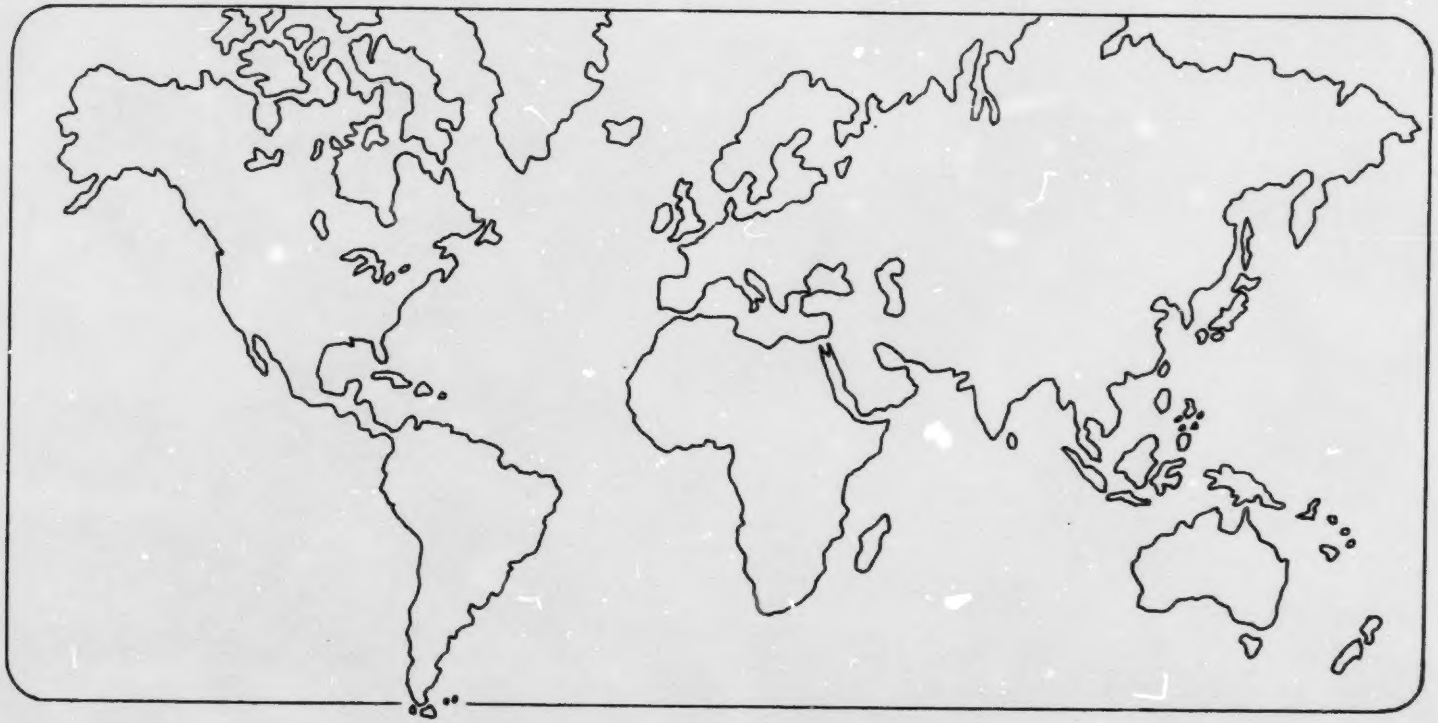
	AMOUNT	AVERAGE CALORIES
Blackberries		
Blueberries		
Bologna		
Boston cream pie		
Bran flakes, 40%		
Bread		
Broccoli, fresh		
Broth, beef		
Brownie		
Butter		
Buttermilk		
Cabbage		
Cake, plain		
frosted		
Canadian bacon		
Candy, hard		
Cantaloupe		



FEAST OR FAMINE

A SPECIAL WORLD FOOD MAP

☐ STARVATION
☐ POTENTIAL STARVATION
☐ ADEQUATE CALORIC INTAKE
☐ ABOVE ADEQUATE CALORIC INTAKE



THE FOOD CRISIS!

USING YOUR WORLD FOOD MAP, A WORLD ALMANAC, AND A POLITICAL MAP OF THE WORLD, ANSWER THE FOLLOWING QUESTIONS.

1. In which area of the world is starvation affecting the most people?
2. The hunger problem, although not confined to one hemisphere, seems to be more severe in which hemisphere?
3. Those areas experiencing famine seem centered in which latitudes?
4. Name one continent which seems to have more than adequate calorie intake?
5. Name one continent where famine seems to exist.
6. Which of the starvation-level areas is affected by its overwhemling population?
7. Which of the potential starvation-level areas is affected by its overwhelming population?
8. Are the areas blessed by "feast" the grain-eaters or protein-eaters of the world?
9. Are these same "feast" areas the developed or underdeveloped areas of the world?
10. Which continent seems to have the most serious food problem?
11. Which country suffers most from floods and typhoons that lay waste to its foodstuffs?
12. Which category from your "food map" applies to most of the tropical countries?

4 - 6

SPORTS ILLUSTRATED

OBJECTIVES...to give expression to Olympic themes by using art, language, and communication skills...to observe sport as a form of artistic expression...to use imagination and a knowledge of sport in creating a variety of art forms...

BACKGROUND...Sport and art together can support an individual's search for perfection. Both are forms of expression available to youth which involve imagination, fantasy, and discipline.

ACTIVITY...1...Show the class photographs, slides, or films of Olympic athletes in action. Discuss these athletic events in terms of:

- Beauty
- Grace
- Style
- Speed
- Strength
- Force
- Form
- Power

With the class, select events which depict one or more of the characteristics of art named above. For example:

- Figure Skating - beauty, grace, style, form
- Discus Throw - strength, power, force

Select one sporting event as your choice of a subject to sketch. If possible, observe the actual event (in gym class, or in the school athletic program) before beginning your sketch; otherwise, use a photograph as your model.

The sketches should demonstrate the artistic characteristics which typify the event. Movement should be studied also, with careful observation of line, gesture, and form.

Completed sketches can be shared with the class and then used as models for sculptures. Encourage the use of different media for sketches (pen and ink, pencil, charcoal). Clay sculptures can be fired, glazed, and put in a showcase.

ACTIVITY...2...Divide the class into groups to begin cooperative projects which will express "the true spirit of sportsmanship." Explain that each group must work together to illustrate one team sporting event. Suggest that groups consider murals, sculpture, puppet design (for a puppet show) which lend themselves to group participation.

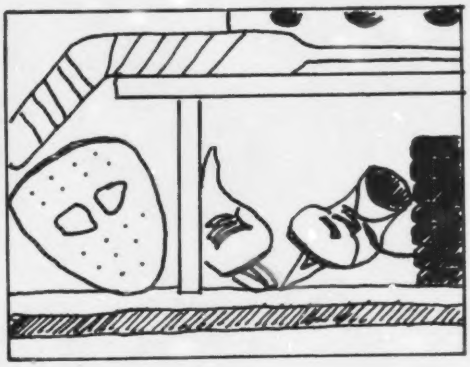
Each group must decide upon one sporting event and each person must contribute to the finished product. Explain that the objective is to convey feelings of cooperation, sportsmanship, and loyalty.

Discuss the meaning of the statement made by Baron Pierre de Coubertin, "The most important part of the Olympic Games is not to win, but to take part; the most important part of life is not the triumph, but the struggle."

Explain that this message can best be conveyed through the expressions, actions, or gestures of the athletes portrayed in the project. Some research should be conducted first to familiarize students with the sports used.

ACTIVITY...3...Discuss the sporting goods and related sports clothing industries. Ask the librarian to assist the students in obtaining data from periodicals, business digests, etc. detailing the amount of money (gross revenues) involved.

- *Can you determine the per capita expenditure on sports equipment and clothing during a recent year?*
- *How much does your family spend on these items in a year? How much is that per family member?*
- *How does your per family member figure compare with the per capita figure arrived at above?*



Discuss the importance of proper equipment and clothing in terms of athletic competition (protection, safety, performance, comfort).

List several sports and describe the special requirements for equipment and clothing.

- *What is the primary function of the equipment. Of the clothing?*
- *How is it designed? What is it made of? Why?*

Select one sport and list the basic equipment and outfit needed. Price these items at local stores and arrive at a total cost for "getting into the sport."

Compare the cost of "your" sport with those of your classmates.

ACTIVITY...4...Direct students to sketch Olympic fashions or equipment of the future. The objective is to design clothing and equipment which is more durable, more comfortable, and more appealing than the present styles. Example: Their sports clothes might be made of a new "miracle material" which will never wear out. The clothes should be designed with a particular sport in mind.

When the project is completed, students should create an advertisement or commercial to "sell their product." Encourage the use of catchy slogans such as:

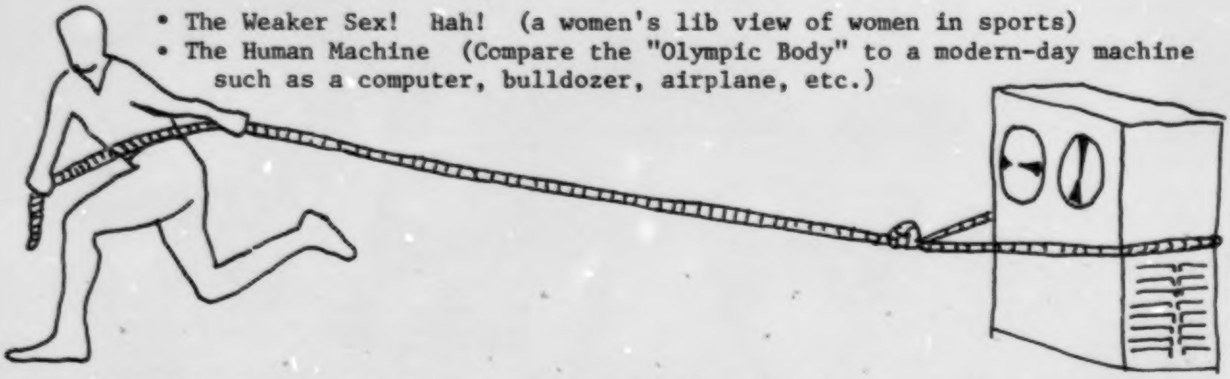
- When I look like a winner, I play like a winner!
- Let us put you in Perfect Form!

*ACTIVITY...5...*Instruct students to design imaginative posters which reflect the following themes:

- Joys of Competition
- Spirit of Olympia
- Sport Is Good for People
- The Thrill of Victory, The Agony of Defeat
- Shape-Up
- Run-for-Fun
- Play-for-Pleasure
- Back to Basic Physical Fitness

Encourage students to create original slogans, and to use a variety of media in their posters. Pairs of students may choose to work together to create cartoon strips depicting the humorous aspects of sports. Suggestions:

- The Weaker Sex! Hah! (a women's lib view of women in sports)
- The Human Machine (Compare the "Olympic Body" to a modern-day machine such as a computer, bulldozer, airplane, etc.)



*ACTIVITY...6...*Select from the related activities below to conclude and summarize the experiences of this unit.

- Collect and display photographs in montages which depict young people participating in sports and which emphasize sportsmanship.

- Make some of the posters and sketches into slides. Students may select appropriate background music or narrate a slide show using prose or poetry.

- Select prints of art which reflect sports throughout history from public or school libraries and display. Have students study the art, the artist, and the era.

- Have the class use its collection of original sketches, sculptures, posters, cartoons, slides, and photographs to develop an "objets d'art olympique" show for the school and community.

REFERENCES...

Coote, James. A Picture History of the Olympics. New York: Macmillan, 1972.

Hollander, Phyllis. American Women In Sports. New York: Grosset, 1972.

Menke, Frank G. Encyclopedia of Sports. Indianapolis, IN: A. S. Barnes and Co., 1978.

Wankelman, Willard F. and Philip Wigg. A Handbook of Arts and Crafts (for Elementary and Junior High Students). Dubuque, IA: William C. Brown, 1961.

OLYMPIC FABLES

4-6

OBJECTIVES...to recognize the important elements of a fable...to understand the meaning of a moral...to write "Olympic Fables" which teach a specific moral...

BACKGROUND...Literature, by means of characterization, deals with human behavior and, as a result, valuable moral lessons may be learned through it. Fables, for example, are representative of human experience and reinforce accepted standards of behavior. For those who believe that athletics contribute to a way of being, it may also provide opportunities to develop character and to teach lessons about desirable human behavior.

ACTIVITY...*1*...List on the chalkboard these characteristics of a fable.

- A fable has animal characters.
- A fable teaches a moral, or a lesson.
- In a fable, good wins over evil.

Explain to the class that a famous Greek storyteller, named Aesop, entertained people by relating fables. Use a wall map and/or a globe to locate Greece. You may wish to describe briefly the world, and life in Greece, during that time in history as background.

Read two or three of Aesop's Fables to the class. Discuss each fable to determine its moral. Then, have the students apply the moral to their own experiences. Point out that the animal characters take on different aspects of human nature (greed, wisdom, vanity, courage, patience, generosity).

With the class, arrive at some conclusions about the format of a fable.

- One or two characters who display or represent certain characteristics of human behavior
- A brief episode or activity designed to culminate in a lesson or moral
- A statement of the lesson or moral

ACTIVITY...*2*...Explain that it was in Greece that the Olympic Games originated.

Read a brief history of the Olympic games as provided in an encyclopedia.

List some of the things which make the Olympics a worthwhile human event.

- *Why did the ancient games begin?*

- *Why were the Modern Olympics begun hundreds of years later? What is the purpose of these Games today?*

Consider with the students the following lessons which might be said to be related to the spirit of the Olympics.

- It's not whether you win or lose, but how you play the game.

- If at first you don't succeed, try, try again.

Ask the class to suggest some other morals or lessons inherent in Olympic competition and select one to serve as the basis for an "Olympic Fable" to be developed together.

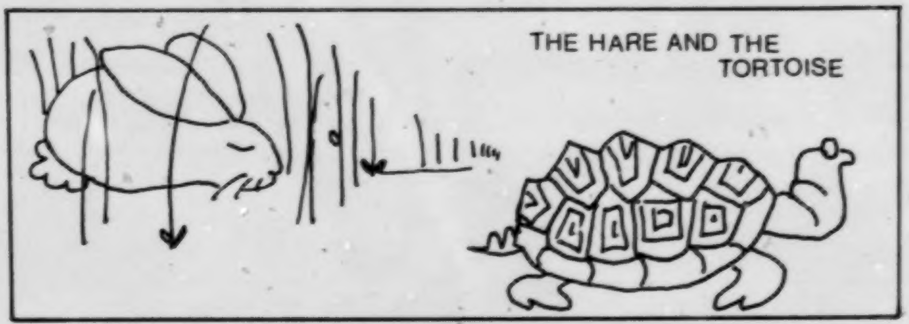
Write your own Olympic Fable based upon something that can be learned from the Olympic Games.

- *How does the fable relate to the success of an Olympic athlete?*

- *How does the lesson pertain to life in general?*

Act out your fables before the class until the class guesses the moral.

Illustrate the fables and arrange them in a class anthology.


THE HARE AND THE TORTOISE

Read fables from other countries to the students and relate them to classwork in geography and history.

REFERENCES...

Aesop. Aesop's Fables. Illustrated by Arthur Rackham. New York: Crown Publications, 1972.

Aesop. Best Loved Fables of Aesop. Joseph Jacobs, ed. New York: Grolier Publications, 1967.

Aesop. The Fables of Aesop. Joseph Jacobs, ed. New York: Macmillan, 1966.

Brown, Marcia. Once A Mouse. New York: Scribner and Sons, 1961.

The Fables of La Fontaine. Adapted and illustrated by Richard Scarry. Garden City, NY: 1963.

Lionni, Leo. Tico and the Golden Wings. New York: Pantheon Books, 1964.

COOPERATION 4-6

OBJECTIVES...to participate in a cooperative task...to understand the importance of cooperation when working with others... to identify cooperative situations in everyday life...to respect the differences, limitations, and opinions of others...

BACKGROUND...Pierre Coubertin was inspired by the prospect of bringing together the sportsmen of the world to compete on friendly and equal terms, forgetting national pride and differences. He believed strongly that people would learn best from each other.

ACTIVITY...1...Play the game, COOPERATION. Begin by asking what cooperation means. On the board list behaviors that are required in cooperation.

- Everyone must understand the problem.
- Instructions must be clear.
- Everyone must believe that he/she can help complete the puzzle.
- Everyone must think of the other person as well as himself/herself.

Describe the game as a puzzle that requires cooperation among its participants. Divide the class into groups of five, and seat each group at a separate table equipped with a set of envelopes. Preparation:

Using stiff paper, cut 25 - 6" x 6" squares.

Make five duplications of each of the five patterns illustrated on the GAME SHEET on the next page.

Label lightly in pencil as indicated.

Cut up the five duplicate sets of five patterns as shown.

Each group of five children will receive five envelopes numbered (1) through (5). This set of five envelopes will contain pieces of five different patterns, distributed as follows:

Envelope (1) - pieces i, h, e
Envelope (2) - pieces a, a, a, c
Envelope (3) - pieces a, j
Envelope (4) - pieces d, f
Envelope (5) - pieces g, b, f, c

Every group should have one each of Envelopes (1) through (5) (one envelope for each group member).

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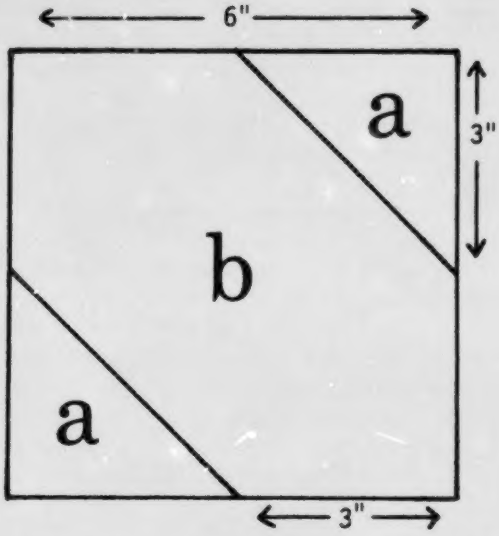
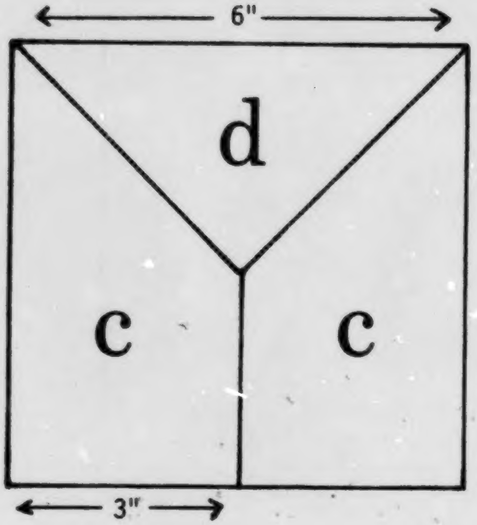
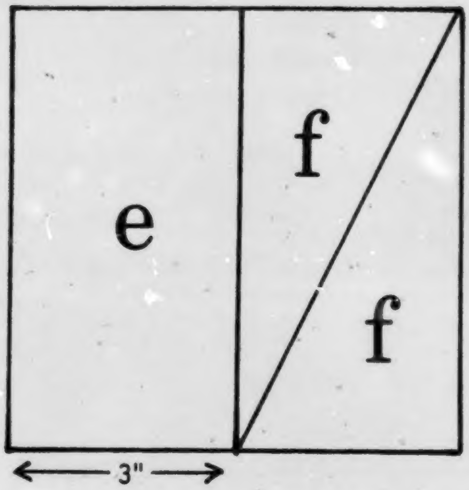
*With some modification, portions of this unit may easily be used with children in the lower grades.

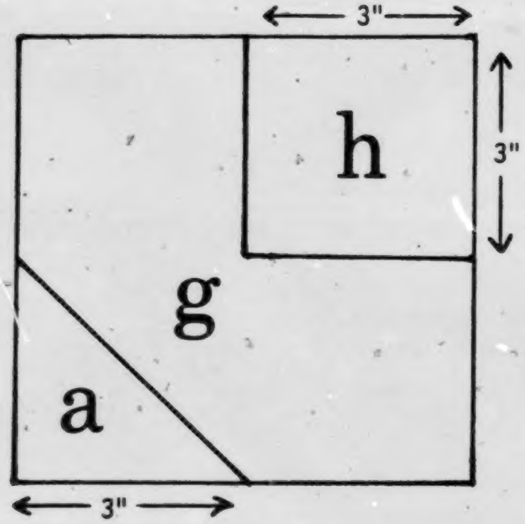
GAME SHEET

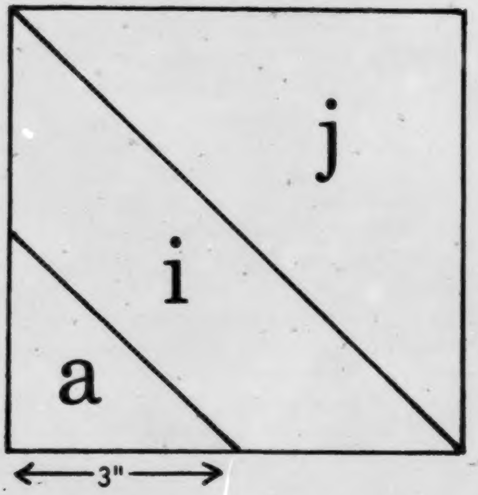
These five combinations are the only ones which will permit the formation of five 6" x 6" squares.











Read the instructions below aloud. It may help if each table has a set of the instructions for reference.

At the signal, each group must form five squares of equal size.

The task is not completed until each member has one completed square.

No member may speak.

No member may ask for a card, or signal for one.

Members may give their cards to others, but may not take from others.

A card is not offered, but given, and it cannot be refused.

Upon completion of the game, discuss the experience.

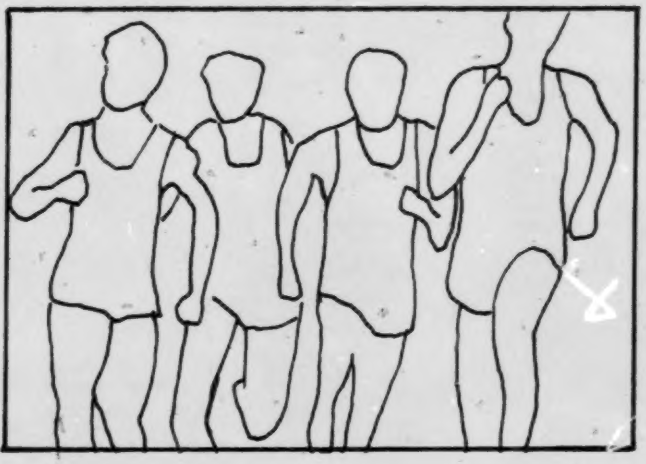
- *How did you feel when someone held a piece and did not see a solution? If you were the person, how did you feel?*
- *What was your reaction when you finished your square and then had to give away a piece to someone else?*
- *What was your reaction when someone completed his/her square and then sat back and didn't offer pieces to help someone else out?*

ACTIVITY...2...Initiate discussion about cooperation.

- *How do team sports foster cooperation among team members?* (following rules, common goal, empathy)
- *If people refused to give their cooperation, what would happen in the puzzle game? In team sports events?* (chaos, every man for himself, no accomplishment, hurt feelings)

Discuss different sports and games which require cooperation. Choose one and discuss in terms of the following: rules, common goals, empathy, mutual respect.

- *Which of the sports you named are played in the Olympic Games?*
- *Report on one of these Olympic events, providing some visuals, sketches, or photographs which demonstrate cooperation.*



Direct the students to divide up into the original five groups. Explain that each group will be responsible for creating an original game or sport that meets the following criteria.

- All members must participate on an equal basis.
- Members must agree upon a set of rules and a name.
- Each game must be completed within a specified time period.
- The members of the team must share a common goal.

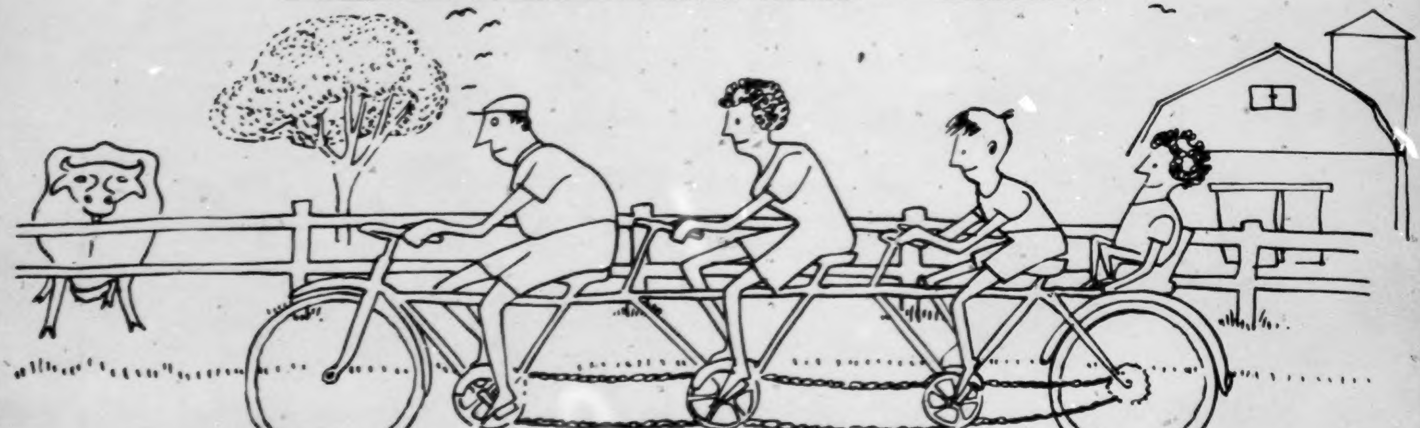
Assist groups that have difficulty getting started, but ideas, and decisions should be generated from the group members alone. Take this opportunity to observe your students. Which children emerge from the group as strong leaders? Which children tend to dominate the situation? How do they handle the responsibility of making their own decisions?

Each group should present its game to the class. After the demonstration, the audience should try to guess some of the rules that were observed and determine the goal of each game. It's important that they also observe participation and instances of cooperation.

- *What role did the likes and differences of group members play in determining the type of game created, and the rules of that game?*
- *What were some problems faced by your group in planning the game?*
- *What did you learn from this experience? How might this experience help you to cooperate in the future?*

Foster a cooperative classroom atmosphere by including students in decision-making processes. Hold regularly scheduled class meetings to establish guidelines for classroom behavior and attitudes, and to encourage open communication.

- How will cooperation further our progress in finding solutions to these world problems: Pollution, Protection of Wildlife, Inflation, World Peace, Women's Liberation, ENERGY, and Food Supply?



ENERGY (CONSERVATION)

MIGHTY MYTHS 4-6

OBJECTIVES...to recognize the important elements of a myth...to learn of the relationship between the Ancient Olympics and mythology...to dramatize myths in the classroom...to write an original, modern myth...

BACKGROUND...The Olympics originated as religious festivals in honor of the greatest of gods, Zeus. The festivals were observed by entire communities and were celebrated near his shrine. The idea then developed that the gods themselves were present but were invisible and delighted in the services and the contests.

ACTIVITY...1...Orient the students to the country of Greece.

Locate Greece on a map of the world. Describe its location in terms of neighboring countries and the continents.

Prepare a brief report on: Greece — Its Past and Its Present. Use the encyclopedia or your textbook (if appropriate).

ACTIVITY...2...Provide the students with background information concerning Greek Mythology. (See REFERENCES, page 112.) Explain that throughout history humans have created stories to explain the origin and order of the universe.

The Greeks believed in the powers of supernatural gods. Many stories, called myths, describe the adventures of the gods and how they influenced life on earth. Being unsure of the outside world and of the vast ocean surrounding them, the Greeks imagined that monsters and beasts inhabited the earth.

Introduce the class to the "characters" of Greek mythology. (See page 111.) Point out that the Greeks valued beauty, wisdom, and the arts. Many of the gods and goddesses represent these ideals. What other facets of the universe are represented? If possible, show pictures of the different gods as they are interested. Explain that the gods are also called "Olympians," in honor of their sacred home, Mount Olympus.

ACTIVITY...3...Using the blackboard or a transparency and overhead projector, outline the structure of a myth.

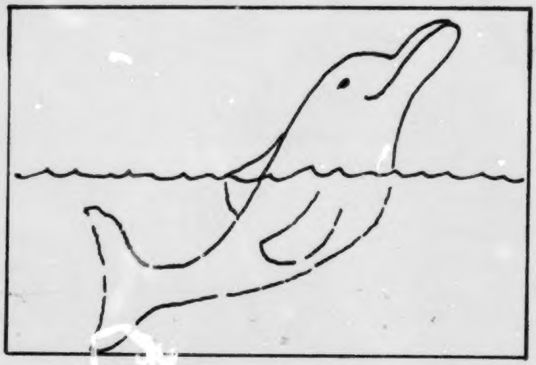
Myths deal with the:

- Relationship between man and gods
- Relationship among gods themselves
- The ways in which men accept destiny
- Man's struggle with the forces of good and evil

Discuss these elements as they apply to myths that the class will now read.

*ACTIVITY...4...*Explain that myths often describe one of the following natural phenomena:

- Creation; e.g., the creator of man, and man's best friend, according to myth, is Prometheus. His brother, Epimetheus created animals.
- Origins of the constellations; Orion, Andromeda
- Seasons; e.g., the story of Demeter and Persephone
- Animal characterizations; e.g., in honor of Argus, a faithful servant Hera kept alive his memory by giving his "one-hundred eyes" to the peacock, her favorite animal. *The peacock is now known to be the vainest of all animals. Why?* Dionysus punished pirates who kidnapped him by turning their ship into a mass of entangled grapevines. The pirates, overcome by fear, threw themselves into the ocean only to be turned into dolphins, the most nearly human of all animals.



Other famous myths describe heroes of the gods. Explain that three famous Greek heroes are: Jason, Hercules, and Theseus. Read myths about these heroes to the class.

- *What is a hero? List the heroic deeds of each mythical hero.*

*ACTIVITY...5...*Explain that the olive tree was a gift from Athena to her favorite city. The gift brought food, oil, and wood to the city and it was named Athens in honor of her.

- *What did the olive wreath symbolize in the Ancient Olympic Games?* (victory, triumph)

One myth explains that Pelops was given a magic team of horses by the god Poseidon. For being victorious in a chariot race, he was made King of Elis. In honor of the gods, he invited heroes from Greece to participate in athletic games of honor. This marked the beginning of the games which are celebrated today.

Some myths describe the anger of the gods. Many times man was punished for trying to imitate the gods. Read the myths:

- Pandora's Box (Her curiosity caused men to be jealous, greedy, etc.)
- The Story of Icarus (who tried to fly to Mt. Olympus)
- Prometheus (who stole fire from the gods)

- *Rewrite one of the myths you have heard or read about and provide illustrations.*

Mythology Data Sheet

I. Greek Gods and Goddesses

Zeus - King of Gods
Ares - God of War
Hephaestus - God of Fire
Aphrodite - Goddess of Love
Demeter - Goddess of Harvest
Poseidon - Lord of the Sea
Athena - Wisdom (Goddess)
Apollo - Light, Music (God)
Artemis - Goddess of Hunt
Dionysus - God of Wine
Hesta - Goddess of the Hearth
Hades - God of the Underworld
Hera - Queen of Olympus
Hermes - Herald of the Gods
Helios - God of the Sun
Selene - Moon

II. Monsters and Beasts

Cerberus - 3-headed watchdog that guarded Hades
Minotaur - half man-half bull. Confined to Labyrinth (maze of passageways).
Centaurs - half man-half horse. Lived without law and order.
Gorgons - hair of snakes. Turned man into stone.
Nine Muses - Turned stories of the Olympians, the earth, the sun, and the stars, into songs and poems.

1. hymns
2. epics
3. history
4. astronomy
5. dance
6. tragedy
7. comedy
8. music
9. lyrics

III. Other Terms

Mount Olympus - home of the ancient Greek gods
Ambrosia, Nectar - food of the gods
Divine ichor - "blood" of the gods that made them immortal

Students might draw symbols which represent the powers of the gods. (Examples: Helios (sun), Selene (moon), Apollo (music - ♫ notes).

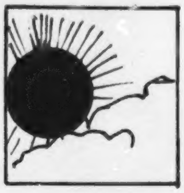
Myths could be dramatized as they are read aloud by a narrator.

Students will enjoy designing costumes which represent the gods, or beasts.

A class mural depicting Mt. Olympus and the famous gods and goddesses could be drawn on a bulletin board.

*ACTIVITY...6...*Help students create original myths to explain "scientific phenomena." Review the characteristics of a myth. Students could work in pairs, or small groups. Some suggested topics are:

- The origins of floods, volcanoes, earthquakes
- An eclipse of the sun
- The Bermuda Triangle
- The approaching Ice Age
- U.F.O.'s



Study word origins. Many words in the English language are derived from Greek myths. Relate word meanings to myth. Examples: nemesis (Nemesis), tantalize (Tantalus), narcissism (Narcissus), echo (Echo).

Find other English words derived from myths.

Make a list of English words which come from the Greek language.

- *Are there any words related in any way to, or used to describe, the Olympics which originated in the Greek language? Name them and explain.*

Some figures of speech are derived from myth.

- *Do some detective work to find the true meaning of: The Midas touch, a Pandora's Box, The Face That Launched a Thousand Ships (Helen of Troy), and others.*

Read myths from other countries. Compare them to Greek myths.

The Roman Empire worshipped the same gods, but gave them Roman names.

Do research to find the Roman counterpart for each of the major Greek gods.

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FACT OR OPINION

4-6

OBJECTIVES...to learn to distinguish between statements of fact and statements of opinion...to understand the necessity of using factual data to support one's opinions and convictions... to appreciate the importance of respecting differences of opinion (especially with regard to Olympic sports-related issues)...

BACKGROUND...Sports-related stories seem to receive more coverage than any other, single world issue in our newspaper. The Olympic Games, although a quadrennial event, generate tremendous media coverage while provoking considerable differences of opinion.

ACTIVITY...1...In order to make judgments concerning such issues, children today need to learn to distinguish between statements of fact and statements of opinion. List the following on the chalkboard:

- A statement of fact can be tested to determine whether or not it is true.
- A statement of opinion tells what one individual or group thinks, feels, or believes to be true.

Share the following with the class and elicit additional examples from them.

- In the early Greek Games the only prizes were garlands and wreaths. (Fact)
- Today the champions in the Olympics are awarded medals of honor. (Fact)
- Olympians should be paid money for their accomplishments. (Opinion)
- Everyone should participate in a sport. (Opinion)

ACTIVITY...2...Conduct a "brainwriting" activity with the class. Divide the class into groups of five. Give each group one sheet of paper with the name of a sport written as a heading. Explain that all group members will participate in an exercise called "Brainwriting," the rules of which follow.

Select a team captain.

No one may talk during the game.

Everyone is shown the topic on the sheet.

At the signal to begin, the captain must list under the topic one statement of fact.

The paper is passed around the group until everyone has contributed one factual statement about the sports topic. (A time limit should be set - 10 minutes.)

The factual statements all have to be different.

The sports chosen as headings should be ones with which the students are familiar. A practice game might be tried with the whole group first. When the brainwriting activity has been completed, each group captain should present the list of facts to the class.

- *Are any of the facts questionable? Are they opinions?*

Appoint a fact finder from your group to clarify any doubtful statements by using an appropriate reference book.

Repeat the activity, asking the students to give their opinions of the sport limiting their responses to a single sentence. Have the class discuss these opinions, recognizing that many differences of opinion will be revealed.

- *Should people be allowed to express their opinion? Why?* (Bill of Rights — freedom of speech)

- *Is it always easy to accept an opinion different from our own? Why?*

- *Discuss reasons why people have different points of view.*

*ACTIVITY...3...*Ask each student to select a topic of interest from the list below and to do research to gather facts about the topic. From this information, each student will write a factual news report on the event.

Topics:

Opening Ceremony

- The Oath
- Lighting the Flame
- Parade of Athletes

Specific Events*

- Track-Field
- Archery
- Basketball
- Bobsled, Toboggan
- Cycling
- Equestrian
- Gymnastics
- Hockey
- Soccer
- Judo
- Skating
- Skiing
- Swimming
- Weightlifting
- Volleyball

*(Additional events may be found in the lists on pages 27-28.)

Other Topics

- Presentation of Medals
- Description of the Olympic Village
- The Ancient Games
- The "Nazi Olympics"

Now, write an editorial giving an opinion of your topic that is supported by fact. The article may be written from your own point of view or from any of the following viewpoints:

- *An athlete participating in an event*
- *A spectator*
- *An Olympic official presiding over the event*
- *A parent of an athlete*
- *A news commentator*

ACTIVITY...4...Bring in newspapers and encourage students to bring them in also. Students can ask parents who travel to bring back newspapers. This gives students an opportunity to see how news stories are covered in different parts of the country.

Cut out articles and underline the facts given.

Check to see if the article answers the questions, who, what, why, when, and where.

Cut out editorials and read to the class. Students should determine if the editorial is supported by facts. Encourage students to formulate opinions of their own in relation to editorials discussed.

RELATED ACTIVITIES...

1...Articles could be shared in a class newspaper. Certain editorials and factual articles could be featured each week.

2...Factual articles from newspapers and magazines can be posted on a class bulletin board.

3...Students can express their own opinions about the following topics by writing brief essays.

- *Women in sports: right or privilege?*
- *Is competition among countries healthy?*
- *Should athletes' participation be subsidized by their governments?*
- *Olympic Gold: Should countries spend millions of dollars in support of the Olympics?*
- *Is sportmanship an endangered species?*

4...Class debates could be scheduled and videotaped.

REFERENCES...

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Messinesi, Xenophon. History of the Olympic Games. New York: Drake Publications, 1973.

4-6 ALL IN THE FAMILY

OBJECTIVES...to study nations of the world by examining participation in various Olympiads...to learn about weather and climate conditions in the world's nations...to find the national origins of certain imported foods found in our supermarkets...to become familiar with animals from other nations which are not common to the United States...to examine the statistics of Olympic participation and medal-winning...

ACTIVITY...1...Refer to the symbolism of the Olympic flag as explained on page 40 and discuss with the class.

Have the children locate the major continents represented by the rings on the flag. Provide a desk copy of a world outline map.

> *Using an atlas, label the continents on your desk map. List the countries located on each continent.* (The students may need to make their lists on a separate sheet of paper and use a number key.)
>
> *Place an asterisk next to the names (and/or numbers) of the nations which have participated in any Olympic Games since 1896, the beginning of the Modern Games. (Commonly available source materials may only indicate countries which have "medaled." If that is the case, use that as the criterion for the asterisks.)*
>
> *Make a list of the world nations which have never participated in the games if that information is available.*
>
> - *Why do you think that some nations have never participated?*
>
> - *Why do you think that some nations' athletes have never earned medals?*

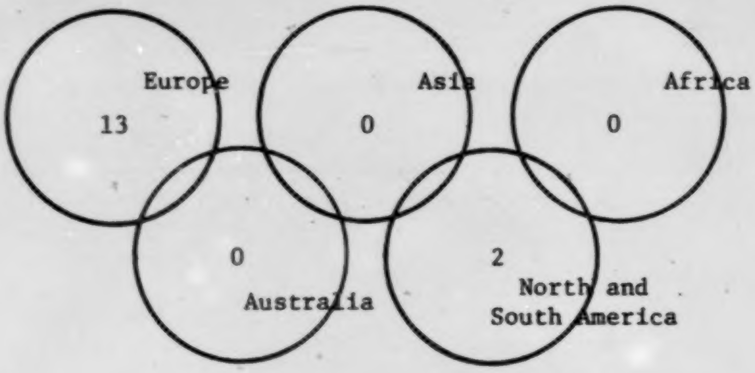
ACTIVITY...2...Construct a worksheet similar to the one on page 117. Instruct the students to use a current World Almanac to find the Medal Tables for the most recent Olympic year. (The worksheet sample uses the 1968 Winter Olympics in Grenoble, France and the 1968 Summer Olympics in Mexico City, Mexico.)

	Winter	*Summer*
- *How many nations participated?*	(37)	(109)
- *How many athletes participated?*	(1,359)	(6,082)
- *How many nations had their athletes win medals?*	(15)	(44)
- *What percentage of the nations participating had athletes who were medal-winners?*	(40.5%)	(40.4%)

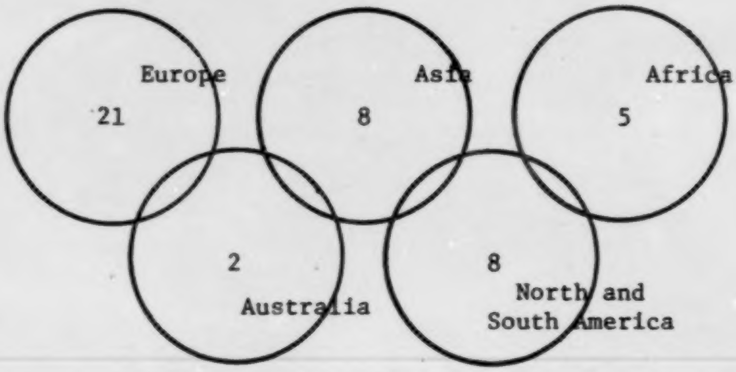
Discuss with the class the extent to which population, national resources, per capita income, and other political and economic factors might influence a nation's participation (whether or not) and performance (size of national team, etc.).

WORKSHEET

Winter Olympics - 1968 - Grenoble, France


Europe
13
Asia
0
Africa
0
0
Australia
2
North and
South America

Summer Olympics - 1968 - Mexico City, Mexico


Europe
21
Asia
8
Africa
5
2
Australia
8
North and
South America

Refer to your list of countries by continent (from Activity 1). *Check the Medal Tables in the Almanac and place the number of medal-winning countries per continent in the correct ring. (Island nations are considered part of the continent they are closest to. USSR may be considered European for these purposes.)*

	Winter	*Summer*
- *Which continent had the most medal-winning nations?*	Europe	Europe
- *What percentage of the total number of medal-winning countries did that represent?*	(86.7%)	(48%)

Try to explain any wide variations among continents in the numbers of medal-winning nations for each.

(Numerous other questions eliciting percentages may be devised, using the data gathered.)

ACTIVITY...3...Ask each student to select 10 nations which compete in the Olympics, making certain that each of the five continents is represented on the list of 10.

- *How far is each country from the sites of the current (upcoming) Winter and Summer Olympics?*

Prepare a summary of climatic conditions in the 10 countries, including seasonal temperature ranges and precipitation.

- *Which of the 10 nations would be ideally suited for either or both of the Games? Which would not be suitable? Explain your answers.*
- *What are the factors related to climate which helped determine sites for the forthcoming Olympics?*

ACTIVITY...4...Suggest that, in the next few days, each student accompany a parent to the supermarket and to a department store with the following assignment in mind:

Make lists of food and nonfood products that are imported from other countries. Note the country of origin for each product.

Locate these nations on the map.

Based upon your spot survey, from which country or countries do we seem to import the most products?

Find out whether or not we also export large quantities of goods to these countries.

PARIS
WINE
France

- *What can you learn about our constant import-export difficulties with Japan?*
- *Are goods actually "traded" in terms of your understanding of that word? Explain and discuss.*

Introduce the concept, "balance of payments," if appropriate.

Make up a game entitled, COUNTRY CONCENTRATION, using 20-24 matched pairs of cards with the information obtained from the store visits (e.g., Norway-sardines; Italy-olives; Japan-television sets; Ireland-linen, etc.) Each player makes the correct matches when cards are turned over, two at a time. The winner is the student with the greatest number of matched pairs.

ACTIVITY...5...Have each child select an animal which may be found in one of the Olympic nations named above (but not in the United States).

Study the animal, its country, and its habitat so that you will be able to:

- *Develop an oral presentation about the animal and its country including location, climate, habitat, etc.*
- *Write a story about the animal, pretending that it is going to participate in the Olympics.*
  - *What event(s) will it enter and why is it suited for that event?*

Refer to the unit, MIGHTY MYTHS, and discuss animal characterizations in Greek mythology.

- *Create animal myths, riddles, jokes, puzzles, or games to share with classmates.*
- *List other participating Olympic countries where this animal lives or ones in which it could live because suitable habitats are available.*

Direct the students to mount photos (magazine illustrations) of their animals on small outline maps of their countries of origins. Collect and shuffle. Select 20 and let the class observe them and discuss their identities for a few minutes. Reshuffle.

Identify as many of the animals and their countries of origin as you can.

*ACTIVITY...6...*__Refer the students to the information about Olympic records in the almanac. Select several timed events and list the times recorded over numerous Olympiads on the chalkboard.__

Find the difference in time for each event from one Olympiad to the next.

(OPTIONAL)

Where improvement has occurred from past Games to the present, determine the percentage of change.

For example: **200-meter butterfly**

```
1956 - 2 min., 19.3 sec.  =   139.3 sec.                .046
1960 - 2 min., 12.8 sec.  =  -132.8 sec.   139.3 /6.5 000
                                6.5                5 5 72
                                                    9 280
                                                    8 358
                                                      922
```

Answer: **4.6%**

Additional mathematics exercises may be developed using Olympic statistics.

*ACTIVITY...7...*Make four sets of small cards (25 cards per set) using four different colors of construction paper.

- Set A - WHO - Name a number of Olympic athletes and a few non-Olympic surprise personalities (e.g., Bruce Jenner, Dorothy Hamill, Wilma Rudolph, Leon Spinks, Superman, Walter Kronkite).
- Set B - WHEN - Designate times of the day at the Olympics (e.g., 9:00 a.m., 6:00 p.m., at sunrise, during the opening ceremonies, 2:00 a.m.).
- Set C - WHERE - Name Olympic sites (e.g., in Lake Placid, in Moscow, in Rome, in Montreal, in Mexico City, in Grenoble, on the Planet Krypton, on the six o'clock news).
- Set D - WHAT - Describe an event, activity, or happening (e.g., ran the 100-meters in record time, reported today's Olympic medal winners, found it too hot to race, was being placed in his space capsule).

Have the students draw a card from each set and:

- Write a brief, bizarre paragraph or essay about the random selection; (e.g., during the opening ceremonies at Lake Placid, Bruce Jenner found it too hot to race...), or,
- Trade cards to create a matched set (if you have prepared them as 25 matched sets of four pieces), and write a realistic or fictional story about the logical sentence represented by the four cards. (e.g., at 9:00 a.m. in Rome, Wilma Rudolph ran the 100-meters in record time... At sunrise on the plant Krypton, Superman was being placed in his space capsule.)

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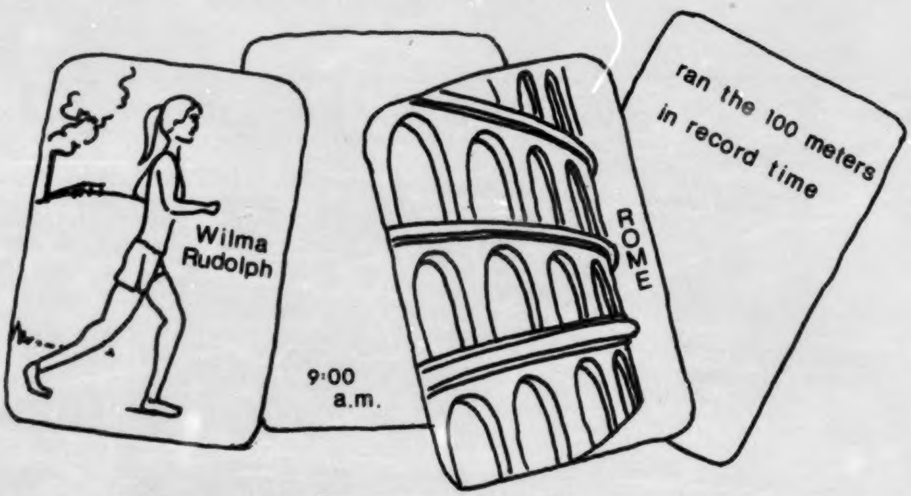


ORIGINS OF OLYMPIC EVENTS

4-6

OBJECTIVE...to gain an understanding of various cultures throughout the world though an investigation of Olympic events and the national games from which they evolved...

BACKGROUND...Games are as old as civilization itself. Ancient Egyptian art shows board games and ball games being played. Indians in the Americas had ball games long before Europeans arrived. And, of course, the Olympic Games were the most famous sports contests of ancient times.

ACTIVITY...1...Refer to the unit, OLD GAMES — NEW GAMES, on page 20. Adapt Activities 1. and 2. to your class' needs. Using the information from the INTRODUCTION which is referred to in 2. and other sources listed in the BIBLIOGRAPHY, the students should be able to answer the questions which follow.

- *Which of the events held in the ancient Olympic Games are, in one form or another, still part of the Olympics?*
- *Choose one of these events and describe how it has changed.*
- *How have the track and field events changed since the early games in Greece?*

Show the film, The Ancient Games, in which former Olympians Bill Toomey and Rafer Johnson compete in a simulation of an ancient pentathlon.

- *Discuss the differences among freestyle wrestling, Greco-Roman wrestling and judo. How does professional wrestling in America today compare with these sports?*

- *How did modern American football originate? Why is it not part of the Olympics? What is "football" as played in Europe and other parts of the world? Compare rugby to American football.*
- *Can the modern American professional football player be likened to the athlete of ancient Greece? to the Roman gladiator? Explain*

ACTIVITY...2...Have the class list the sports which are currently part of the Olympic Games, Winter and Summer.

Investigate each sport listed, describe it briefly, and indicate how and where it originated.

- *Are any of these sports traceable to a single culture, region, or nation? Discuss.*

ACTIVITY...3...Discuss the following passage with the class.

The evolution of games from simple play to more complex forms with rules may be compared to the evolution of man from simple valley living to the increasingly complex structured interactions of humans in a large world made smaller by technology. This "smaller" world probably fostered the spread of many sports and games to a more closely united world.

Can it be said that sports and games have had a tendency to bring the world closer together?

- *Can you cite examples of sports which have been transplanted because of technological change (e.g., transportation)?*
- *Why is baseball so popular in Japan?*
- *Why do you think baseball, tennis, and golf are not on the Olympic program?*

ACTIVITY...4...Cite numerous historical eras for the class and ask them to do research and match a game or sport with each one.

- *Mesopotamia (ca. 3000 B.C.)*
- *Egypt (ca. 2500 B.C.)*
- *China (ca. 1500 B.C.)*
- *Greece (ca. 700 B.C.)*
- *Ancient Rome (ca. 200 A.D.)*
- *Medieval Europe (900 A.D.)*
- *Colonial America (1750 A.D.)*

- *Given what you know about the materials available to humans during the Stone Age, Iron Age, and the Age of Bronze, what form of games or sports do you think they might have been able to devise?*

Invent a new game, make rules for it, and describe it to the class.

ACTIVITY...5...Ask the class to write an essay on the development of games and sports throughout history, including an evaluation of the impact of both the Ancient and Modern Olympic Games. They should consider whether or not they judge sports to be a positive influence in the interactions of the world's peoples.

REFERENCES...

The Ancient Games. Film. Middletown, CT: Xerox, 1972.

Glubok, Shirley and Alfred Tamarin. Olympic Games in Ancient Greece. New York: Harper & Row, 1976.

Grunfeld, Frederic. Games of the World. New York: Holt, Rinehart, and Winston, 1975.

Ickis, Marguerite. The Book of Games and Entertainment the World Over. New York: Dodd, Mead, 1969.

McWhirter, Mary Esther. Games Enjoyed by Children Around the World. Philadelphia, PA: American Friends Service Committee, 1970.

WINNING WAYS WITH WORDS

5

OBJECTIVES...to review contemporary slogans, sayings, and mottoes...to appreciate the effectiveness of words when used as slogans, mottoes, and catch phrases...to explain the purpose and construction of a slogan...to develop and write unique slogans for the 1980 or 1984 Olympic Games, Olympism, or for athletics in general...

BACKGROUND...Through the years, words have influenced, even directed on many occasions, the actual course of history. Among society's most potent verbal inventions have been the catch phrase, the pithy saying, the motto, and, especially, the closely related slogan. "Remember Pearl Harbor" and "We Shall Overcome" each had the emotional impact to help mobilize a large number of people for a common cause. The advertising industry has long realized the potential of slogans to promote their products. Youngsters in our elementary schools have learned catch phrases like, "Plop, Plop, Fizz, Fizz" and "I'd Rather Fight Than Switch" more quickly than important terms or phrases in their school books. We have come a long way with sloganeering since the Scottish highlanders and Irish clansmen screamed the Gaelic word, *sluagh-gairm*, their battle cry and the beginning of the word, "slogan," in our English language.

ACTIVITY...1...Using the overhead projector or chalkboard, present to the class examples of slogans, mottoes, or catch phrases which are associated with games, sports, and athletics. Show one of these at a time and direct the students each time to analyze and thereby determine its purpose and meaning as follows:

- *What does this statement ask or tell you to do?*
- *Whom is the statement speaking to?*
- *Does the statement make you want to do something (to act)?*
- *Does the statement make you think?*
- *Is the statement effective (good) or ineffective (bad)?*

Winning and Losing

Don't be second best.
May the best man/woman win.
Someone has to lose.

What some people enjoy most about table tennis is stepping on the ball.

Success is only a matter of luck. Ask any person who has failed.

Nothing succeeds like success. Nothing fails like failure.

The thrill of victory; the agony of defeat.

Success comes in "cans," failure in "can'ts."

If you can't win, make the fellow ahead of you break the record.

The only drawback in being a good sport is that you have to lose to prove it.

Success goes to your head, failure to your heart.

When the going gets tough, the tough get going.

Explain to the students the criteria necessary for the development of a good slogan. Successful slogans have generally been known to:

- Be brief
- Have rhythm
- Rhyme
- Make you think
- Make you act

Review those slogans and related sayings cited as effective or good in Activity 1 and apply the five criteria stated above to each of these.

Rate each on a scale of one to five, with five indicating that all the criteria are represented in the statement.

- *How many of the slogans, mottoes, and catch phrases can pass the "5-point test?"*

*ACTIVITY...2...*Challenge the students with the question: *Do you think you can make a good slogan?*

Organize the class into groups of two and then direct each pair of students to develop a slogan by relying on the five criteria given above. (Some of the words listed in Activity 4 might suggest slogans or be used in them.) The slogan should concern the Olympic Games in 1980 and 1984, Olympism, or athletics in general.

After all the pairs have had sufficient time to prepare, have each try out its slogans, one at a time, before the entire class. You may then wish to rate and/or grade each statement and display the outstanding ones on the classroom bulletin board.

Develop a slogan for each of the school district's athletic teams.

Research the literature for additional slogans, mottoes, and catch phrases concerning athletics.

Olympic Games and Olympism

The joy of effort. (an Olympic medal)

Sport is a way of being.

Olympic gold.

The gods love the Games.

Swifter, Higher, Stronger.

The most important thing in the Olympic Games is not to win but to take part.

The most important thing in life is not the triumph but the struggle.

The essential thing is not to have conquered but to have fought well.

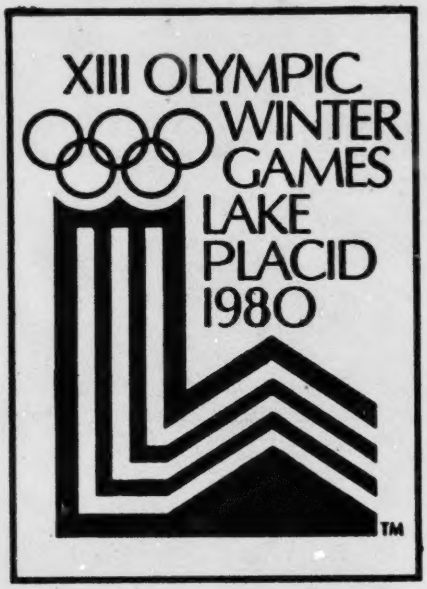
Amateur sport is for the participants, while professional sport, so-called, is for the spectators.

The Games are ended, long live the Games.

In this way people may ignite the team spirit of all mankind.

achievement
agility
altitude
amateur
ambition
ambitious
amiable
anchor
ancient
appreciation
archery
athlete
atmosphere
barrier
basketball
brilliance
camaraderie
campaign
candidate
canoe
capacity
captain
carnival
celebration
champion
javelin
jockey
jubilant
kayak
magnificent
marathon
medal
military
myth
nationality
oath
occasion
official
Olympiad
Olympics
opponent
pageantry
panorama
parallel
participation
peaceful
pentathlon
performance
physical
pigeon

*ACTIVITY...3...*Organize the class into groups of five for a contest in drawing the logos or emblems for the 1984 Summer and Winter Olympic Games. A good drawing should be (1) distinctive in appearance, (2) simplistic in design, and (3) clear as to its intent. For example:



*ACTIVITY...4...*Use the Olympic vocabulary list (pp. 124-125) for a number of language arts exercises with the class.

Alphabetize the vocabulary words (after you have scrambled the list).

Group the words into two categories: those which have a meaning primarily associated with athletic competition and those which are more general in meaning. Defend your decisions, thus exercising your knowledge of the definitions. Write sentences using selected words. Use several words in a paragraph about the Games. Construct a crossword, a jumble, or an acrostic (See page 86.) using these words. Conduct a spelling bee. Conclude with a spelling test.

characteristic
chariot
citizen
civilization
colleague
combatants
committee
competition
competitors
congratulate
cooperation
conquer
conquerors
conquest
consolation
conspirator
contestant
contradiction
courage
creed
cycle
decathlon
defeat
dignity
empire
enormous
enthusiastic
equestrian
exercise
exhaustion
exhibition
exquisite
fatigue
festival
foreign
fundamental
glory
grimace
gymnastics
harmony
historian
horizontal
hurdles
individual
international
pledge
podium
population
practice
praise
privilege
prize
professional
pursuit
racquets
referee
relay
representative
responsible
ritual
rivalry
sacrifice
sculptor
soccer
solemn
spectacle
spectator
spirit
stadium
stamina
statistics
statue
steeplechase
strength
summit
superiority
tandem
technique
traditional
treacherous
tremendous
triumph
vault
velocity
victor
victorious
volleyball
wreath
wrestling
yacht

REFERENCES...

Esar, Evan. 20,000 Quips and Quotes. Garden City, NY: Doubleday, 1968.

Trippett, Frank. "Slogan Power! Slogan Power!" Time, Feb. 12, 1979, p. 102.

5-6 ALL ROADS LEAD TO . . .

OBJECTIVES...to use vocabulary associated with travel to, from, and at the Olympic Games...to contrast the means of transportation used in the 776 B.C., 1986, 1920, and 1980 Olympic Games...to differentiate among people's transportation needs at the Olympics according to their roles at the Games...to learn to interpret circle and bar graphs...to master the use of transportation timetables...to learn to use maps for measuring distances between points in an Olympic village...to design a transportation system for the Olympic Games...

ACTIVITY...*1*...Reproduce the "connect-the-dots" activity on page 127, and distribute to the class to complete as a means of introducing a vocabulary of transportation.

Connect the words (dots) in alphabetical order.

Define any unfamiliar words found on the activity sheet and discuss their meaning with your classmates.

Write a paragraph describing what you would imagine to be a transportation system at the Olympic Games, using as many of the vocabulary words as possible.

ACTIVITY...*2*...Make available to the students books, articles, and excerpts about Olympic history such as those listed on page 134 and elsewhere in this publication. (See the suggestion in RELATED ACTIVITIES, OLYMPIC "GAMES," page 84 .)

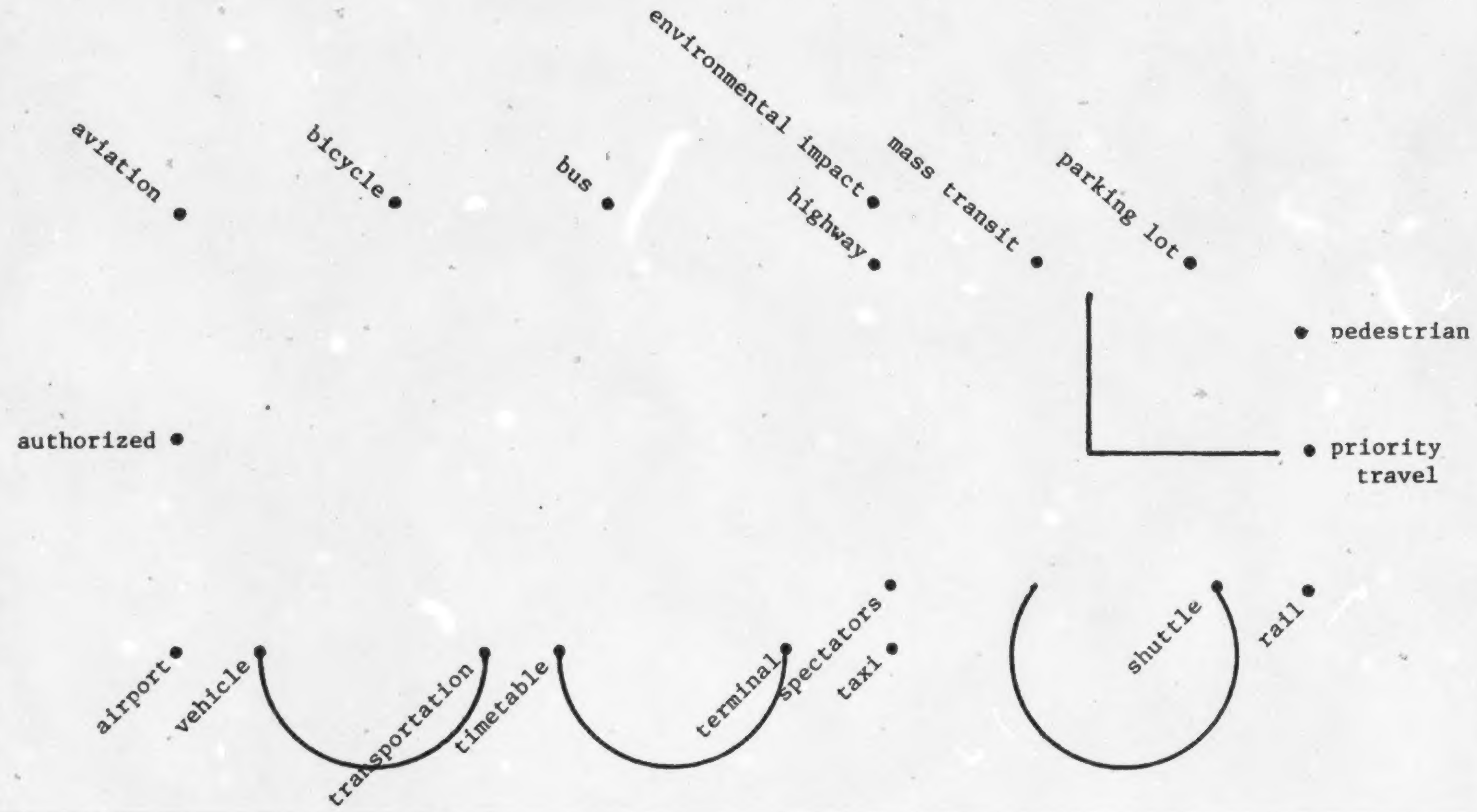
Compare the modes of transportation used for athletes and spectators at the first Olympic Games in 776 B.C. with those used at the first modern Olympics (1896), the 1920 Games, and the 1980 Games.

In making these comparisons, use a variety of illustrative devices (illustrated timelines models; simulated interviews on tape, etc.) to add audio and/or visual highlights to this class reporting activity.

Consider the following questions as an aid to completing the project:

- *How many athletes participated in the 776 B.C. Games as compared with the others mentioned above?*
- *What made the 776 B.C. Games so different from the modern games in terms of the modes of transportation used?*
- *How many countries sent athletes to the 1896, 1920, and 1980 Games (Summer and Winter)? Approximately how many came from each country?*
- *Explain the circumstances which led to a reduced number of participants at the Moscow Summer Games in 1980.*

TRANSPORTATION VOCABULARY


aviation
bicycle
bus
environmental impact
highway
mass transit
parking lot
pedestrian
authorized
priority travel
airport
vehicle
transportation
timetable
terminal
spectators
taxi
shuttle
rail

DIRECTIONS:

Connect the words in alphabetical order starting with airport.

- *What is a boycott? Mention some examples of boycotts you have discussed in your social studies lessons.*

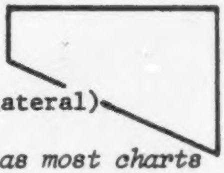
- *How many countries pay for the expenses of their athletes? How many do not? Explain.*

- *Do all countries now use air travel for their athletes? Explain.*

Use the chart below to list the different modes of transportation used in connection with (to, at, from) the Games. (If you choose to do the first OPTIONAL *activity below, do it before completing the chart.)*

776 B.C.	1896	1920	1980

OPTIONAL: *The chart you are going to complete is presently open-ended. Considering how your information is going to "shape up," draw what you think will be the remainder of the chart's perimeter if it were to most nearly enclose the information. Use only one new, straight line while extending any of the original vertical lines as necessary.*



- *Draw the shape on the chalkboard to show the class.*

- *What kind of a plane figure is it?* (trapezoid, quadrilateral)

- *Explain why your figure is not a rectangle or a square as most charts are.* (There is a "transportation" answer and a "mathematics" answer to this question.)

- *Construct a timeline showing the development of transportation from 776 B.C. to 1980 A.D.*

OPTIONAL: *What was the Mutiny of the Matoika (1920)?*

ACTIVITY...3...Distribute copies of the graphs on the next page to the class for discussion as a means of assessing some of the transportation implications for a winter Olympiad.

Directions: *Study the graph and answer the questions which follow.*

- *Which is the largest group? the smallest group?*

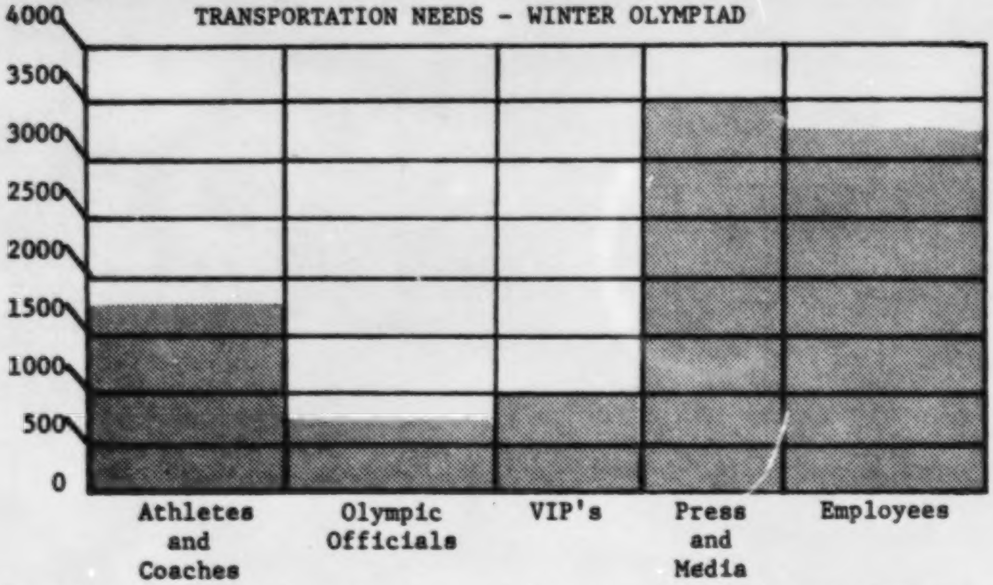
- *What is the total number of people needing transportation?* (Approx. 9250)

- *How many more athletes and coaches are there than officials?*

- *Which group do you expect would travel the most? the least?*

- *If 40,000 spectators could be expected to require transportation each day, how many more horizontal lines would be necessary to group this additional category?* (72)

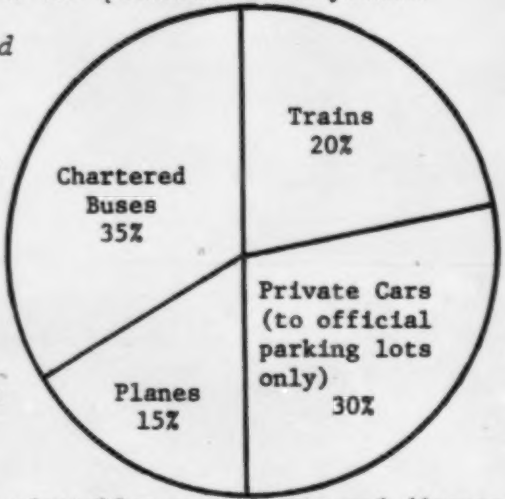
- *How many people will be transported altogether, including spectators?* (Approx. 49,250)



One of the greatest problems encountered by potential spectators of Olympiads is transportation. From among many possible modes of transportation, the circle graph (pie graph) shows four.

Directions: *Examine the graph and answer the questions which follow.*

- *Which transportation mode is used most frequently? least often?*
- *Which means of transportation would be the cheapest? the most expensive?*
- *Which modes would get you directly to the Olympic sites? Which would require connecting transportation?*
- *Name any modes of transportation which have not been mentioned. Redo the graph including these.*



*ACTIVITY...4...*Distribute copies of the timetables on page 130 and discuss the questions pertaining to these transportation schedules. The students may wish to substitute imaginative place names of their own (a contest, perhaps) for the ones provided as they learn to use timetables and begin to understand the enormity of undertaking to stage an Olympiad.

Answer these questions about the transportation timetables you have:

- *How many planes fly daily into Olympic Village ?*
- *Where do the flights originate?*

AIR OLYMPIC TIMETABLE (Effective Feb. 1, 1980)

Destination	Depart.	Arr.	Freq. of Service*	# of Stops
To Olympic Village	8:50 a	9:40 a		0
From Athlon	11:45 a	12:35 a	6	0
	3:40 p	4:30 p		0
To Olympic Village	11:45 a	4:30 p		2
From Sprint City	2:30 p	7:15 p	6	1
To Olympic Village From Brundage	8:50 a	10:45 a		0
To Olympic Village	10:55 a	12:30 p		0
From Coubertown	12:45 p	2:20 p	6	0
	3:50 p	5:25 p	6	0
	6:30 p	8:05 p		0
To Athlon	7:30 a	8:20 a		0
From Olympic Village	9:30 a	10:20 a	6	0
	2:20 p	3:10 p	7	0
To Sprint City	7:00 a	10:45 a		2
From Olympic Village	6:00 p	9:45 p	6	2
To Brundage From Olympic Village	8:30 a	10:25 a		0
To Coubertown	6:45 a	8:20 a	6	
From Olympic Village	12:20 p	1:55 p	7	
	5:35 p	7:10 p		

*Symbols: Saturday only - 6
Sunday only - 7
A.M. - a
P.M. - p

OLYMPIC LIMITED SCHEDULE

Eastbound (read down)				Stops	Westbound (read up)		
161	155	147	125		104	126	162
5:45 p	3:50 p	12:35 p	8:40 a	LV Olympic Village AR	2:40 p	7:50 p	6:45 p
f	f	f	f	Medal Valley	f	f	f
6:05 p	4:10 p	12:55 p	9:00 a	Lake Athlon	2:20 p	7:38 p	6:24 a
7:05 p	5:10 p	1:55 p	10:00 a	Skatersville	1:15 p	6:40 p	5:15 a
8:10 p	6:05 p	2:50 p	11:05 a	Alpine Falls	12:30 p	5:55 p	4:30 a
8:30 p	6:35 p	3:10 p	11:30 a	AR Tobbogganburg LV	12:10 p	5:35 p	4:10 a
8:40 p	6:45 p	3:20 p	11:40 a	LV Tobbogganburg AR	12:00 a	5:25 p	4:00 a
9:19 p	7:05 p	3:45 p	12:05 a	Cycleville	10:41 a	4:06 p	2:41 a
10:00 p	8:00 p	5:00 p	1:00 a	Mt. Olympia	10:00 a	3:15 p	2:00 a
12:59 a	10:50 p	7:50 p	3:50 p	South Olympism	8:00 a	1:00 p	11:30 p

Symbols: A.M. - a
P.M. - p
All runs daily unless otherwise noted
flag stop - f

- *How long does it take to get to Olympic Village from the furthest point (including stops)? from the closest point?* (by air)

- *How many flights leave Olympic Village daily?*

- *Do some flights fly only on weekends?*

- *What is the greatest number of stops for one flight?*

- *How many trains arrive at and depart from Olympic Village daily?*

- *Where do the trains originate? What cities are visited enroute?*

- *How long does it take to get to Olympic Village from the furthest point? from the closest point?* (by rail)

- *Do some trains only travel on weekends? How many travel daily?*

ACTIVITY...5...**Provide the students with copies of the maps on page 132 with which they may complete some simple mileage computations, while imagining what the layout of an Olympic sports complex might be like.**

Figure the distance in meters between locations in each of the pairs below:

Summer

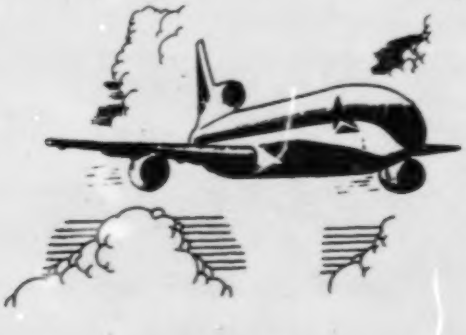
____ *Olympic Village to Competition Corner (water events)*

____ *Olympic Village to Track and Field*

____ *Olympic Village to Pools*

____ *Track and Field to Olympic Village*

____ *Track and Field to Pools*



Winter

____ *Bobsled to Olympic Village*

____ *Bobsled to Alpine Events*

____ *Jumping to Olympic Village*

____ *Jumping to Bobsled*

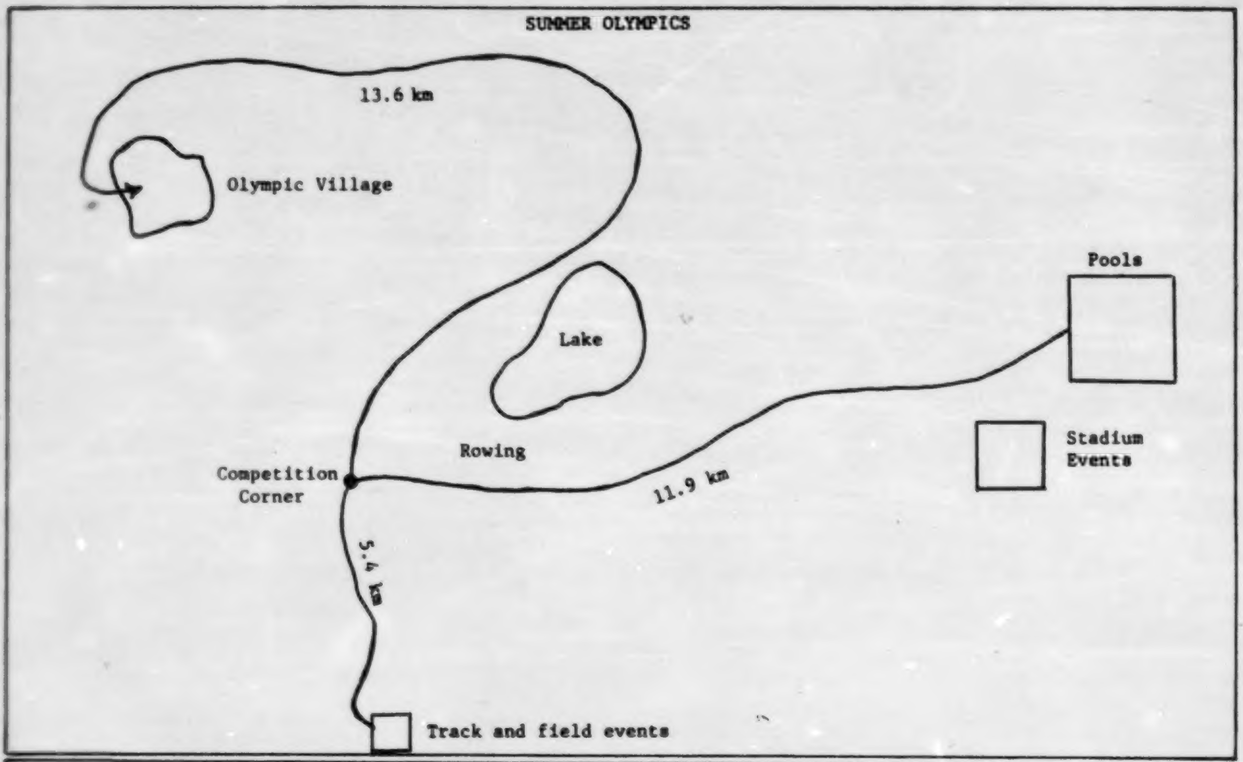
____ *Jumping to Alpine*

____ *Jumping to Skating*

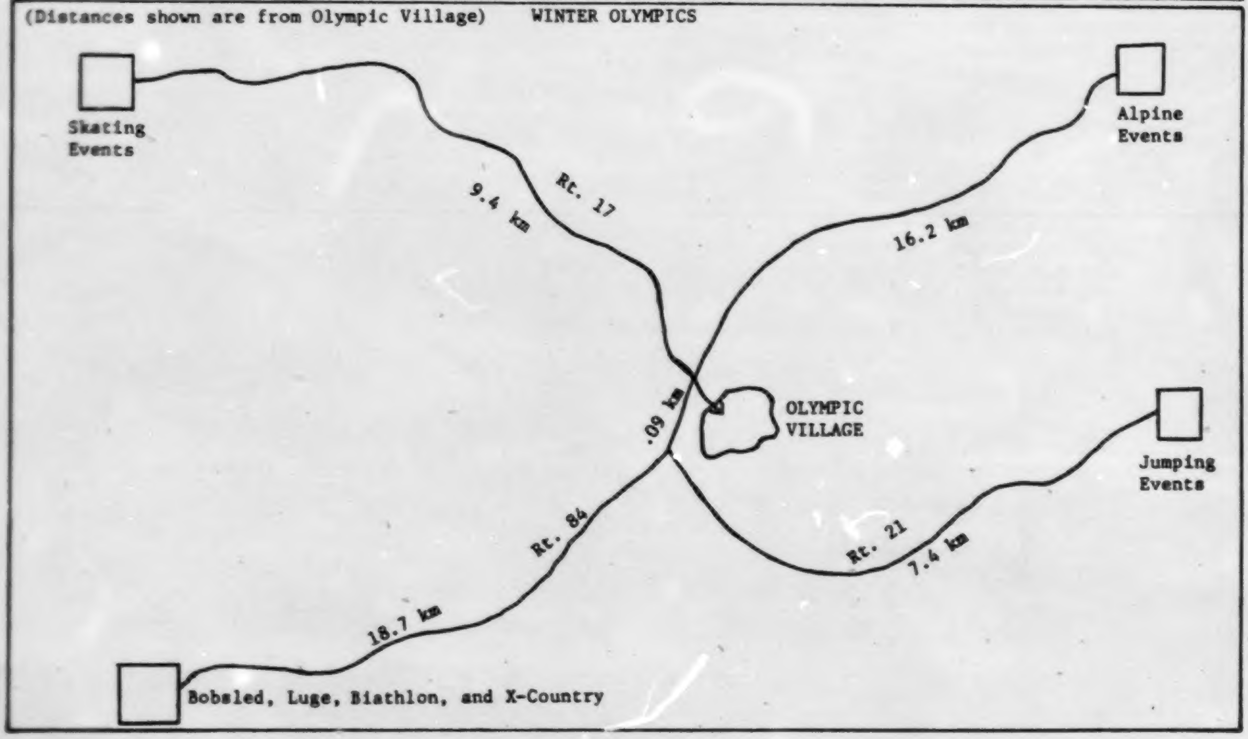
____ *Skating to Alpine*

____ *Skating to Olympic Village*

____ *Skating to Bobsled*


SUMMER OLYMPICS

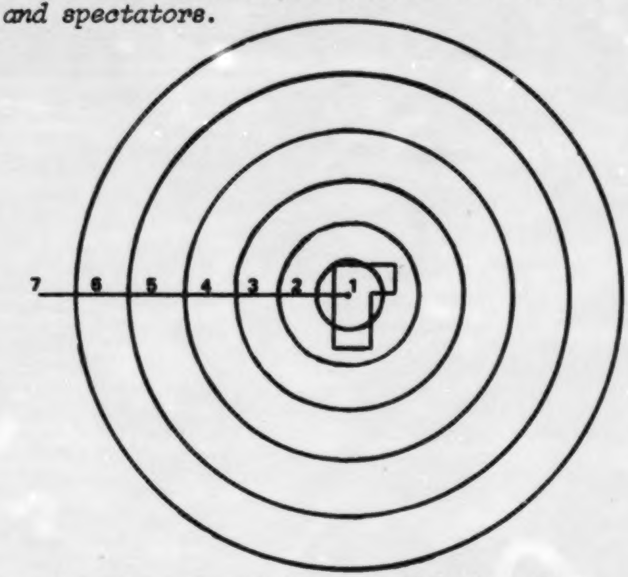
13.6 km
Olympic Village
Pools
Lake
Rowing
Stadium Events
Competition Corner
11.9 km
5.4 km
Track and field events


(Distances shown are from Olympic Village) WINTER OLYMPICS

Skating Events
Alpine Events
Rt. 17
9.4 km
16.2 km
OLYMPIC VILLAGE
.09 km
Jumping Events
Rt. 84
Rt. 21
7.4 km
18.7 km
Bobsled, Luge, Biathlon, and X-Country

*ACTIVITY...6...*In preparation for a class project which would visualize or simulate the siting of an Olympiad in your area, obtain a city (or village) map, a county map, and a state map. Discuss with the children the implications of depositing 6,000 athletes (2,000 for Winter Games) and their coaches, 250,000 spectators (40,000...), TV-radio-press representatives, etc., in the community, even for a short period of time. For the purpose of the subsequent student activities, assume that a Winter Olympiad will be held so that more manageable figures may be used for computation. You may wish to write to the Lake Placid Olympic Committee to learn of the contingencies (expense, crowds, etc.) that had to be anticipated. Assign committees of class members to undertake the assignments and activities below.

Divide your community and the surrounding area into zones as shown below in order to estimate what kinds of transportation are likely to be needed for participants and spectators.



Consider:

- *Distances from the city center to the outlying areas (Use your own mileage key.)*
- *Types of transportation that will be permitted in the various zones*
- *Availability of public transportation in the areas outlined*
- *Population densities of the various zones*

Propose a transportation plan for the community by considering these facts:

- *Which zone(s) should be free of private auto traffic?*
- *What forms of, and how much, public transportation will need to be added?*
- *How much essential (emergency) vehicle traffic should be allowed in these inner zones?*
- *Conduct traffic counts at several major intersections in the community.*
- *What will happen to this traffic when the Olympics arrive? How would you plan for this problem?*

Discuss the environmental impact upon the area.

List as many of the community's day-to-day activities as possible and try to describe how each will change during the Olympic period.

List the services that the community provides for its citizens. Describe how greatly increased demands for these services (water, energy, sewage, trash collection, security, banking, housing, etc.) will be met during the Olympics.

The children should prepare their findings in the form of committee reports. Any devices such as models and maps and overlays which will enhance the reports for the benefit of the rest of the class should be encouraged.

The International Olympic Committee has discussed the feasibility of finding a permanent home for these quadrennial events. Using the insight they have gained from the preceding activities, the students should be able to suggest a number of sites around the world which might be considered and why.

REFERENCES...

Coolidge, Olivia. The Golden Days of Greece. New York: Thomas Y. Crowell, 1968.

Coolidge, Olivia. The Men of Athens. Boston: Houghton Mifflin, 1962.

Henry, Williams and Patricia Henry Yeomans. An Approved History of the Olympic Games. New York: Putnam, 1976.

Kieran, John and Arthur Daley. The Story of the Olympic Games, 776 B.C.-1976 A.D.. Philadelphia: Lippincott, 1977.

I'm the raccoon who has been designated the official mascot of the 1980 Olympic Winter Games which will take place in Lake Placid, N.Y., February 13–24.

I will be the world's most famous raccoon and people everywhere will see pictures of me skating and skiing. The lucky person whose name for me is chosen, will receive 2 tickets to attend the opening ceremonies of the Olympic Winter Games.

USA LAKE PLACID 1980

1980
LAKE PLACID
TM

Please give me a name... RONI

5-6 ANIMAL OLYMPICS

OBJECTIVES...to have the students become more familiar with Olympic competition by relating the individual events to animals whose characteristics "would suit them to these events"...to have the students learn more about animal life by studying the body characteristics of various animals and how these bodily structures would make the individual animal suited to a particular Olympic event...

BACKGROUND...The human body is a remarkable engineering achievement and one worthy of considerable study by students. The Olympic Games are, in part, an exhibition of these engineering feats. However, animals are also very mobile and could, if possessed of human intelligence, perform admirably in many Olympic events. The following activities encourage students to hypothesize what particular animals could do in the Olympic Games if given human intelligence. These activities are to be used as a means of examining human and animal physiology while learning about Olympic competition. Students should be cautioned against anthropomorphizing (attributing human shape or characteristics to animals).

ACTIVITY...1...The Olympic Games are comprised of highly competitive athletic events that require a considerable amount of physical prowess. Have students attempt to match some of these events with species of animals whose physical characteristics would appear to be appropriate to their (the events') requirements. A first inclination would be to use large mammals rather exclusively, but encourage the students to broaden their views and consider other classes of vertebrates, and other phyla, as well.

> *What animals might be suitable contestants in the 100-meter dash?* (cheetah, pronghorn antelope, quarter horse. Greater imagination would result in including the swift and the peregrine falcon.)
>
> *Continue selecting contestants for a variety of events as in the examples provided.*

100-meter dash - cheetah, etc
400-meter run - lion, leopard, centipede
1500-meter run - African hunting dog, hyena, wolf
5000-meter run - Thompsons gazelle
Marathon - Arctic tern, ruby-throated hummingbird
50-kilometer walk - wildebeest, caribou
High jump - lion, flea
Shotput - gorilla, orangutan
100-meter freestyle - seal, dolphin, penguin, backswimmer beetle
Platform diving - penguin, seal
Boxing - kangaroo
Wrestling - bear, python
Weightlifting - orangutan, gorilla, ant
Gymnastics - hummingbird, monkey, gibbon ape
Water polo otter, dolphin, killer whale

Describe your reasons for pairing the animals and events as you have. What physical attributes would seem to suit them for the events?

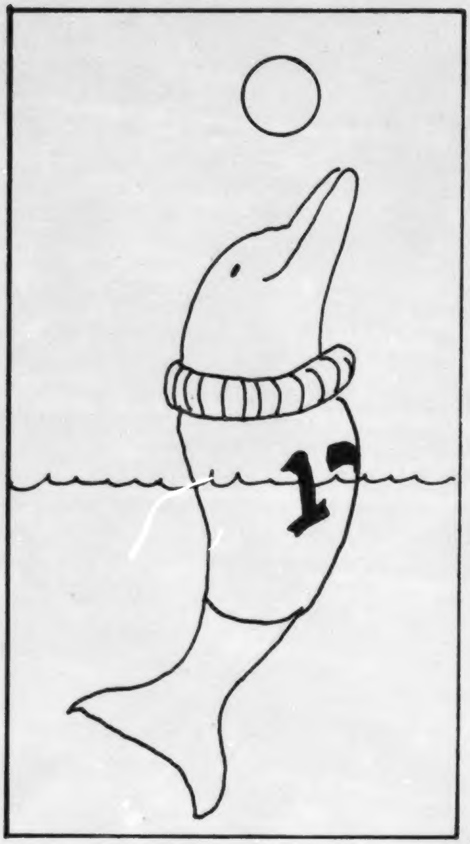
Select one of the animals and develop a thorough research report about it. Present a summary of your report to the class.

Probe with the students into the reasons why, anatomically and physiologically, the animal might perform well in the event.

Describe some situations in which an animal would do better than a human in an actual Olympic event. **(For example, a dolphin could swim 100 meters in a pool much quicker than a human could.)**

Why is a dolphin more suited for swimming than a human?

Continue this type of discussion both for the dolphin-human comparisons as well as for instances in which animals would be out-performed by a human.



No animal could perform all the Olympic events as well as a human can. Discuss why this is true.

Discuss why the human body structure is suited for each Olympic event. For example, what would you expect to see in the body structure of discus throwers that would allow them to throw the discus well?

*ACTIVITY...2...***Discuss the concepts of endangered species, adaptation, and natural selection. For example:**

Why are most of the animals discussed above ideally suited for survival, given their natural habitats and physical characteristics?

What is natural selection? **(The process by which those individuals [of species] with characteristics that help them to survive [survival of the fittest] transmit their characteristics, while those less able to become adapted tend to die out, so that in the course of generations there is a progressive tendency in the species to a greater degree of adaptation.)**

How do species become endangered? extinct?

Name some species which are endangered and some which have become extinct. Explain why this has occurred.

STANDARDS & MEASURES

5-6

OBJECTIVES...to learn the concepts of standards and standardization...to investigate the history of weights and measures... to discover the origins of the metric system...to discuss the present role of metrics in the world and in the United States...

BACKGROUND...Throughout history, it has been possible to observe that innumerable types of standards have been established and adopted by the world's peoples as attempts to impart order to the chaos of an increasingly populous and complex human society. Standards have been established to measure and compare human growth, production, commerce, and individual and collective achievement in all aspects of life. A prime example of standardization is the emergence of a (nearly) uniform system of weights and measures.

ACTIVITY...1...Consider with the class the following definitions:

> standard, *n*: something established by authority, custom, or general consent as a model or example... or, as a rule for the measure of quantity, weight, extent, value, or quality; a means of determining what a thing should be (synonyms: CRITERION, GAUGE, YARDSTICK, TOUCHSTONE, BENCHMARK)
>
> *adj*: constituting or conforming to a standard, especially as established by law or custom
>
> standardize, *vt:* to compare with a standard
>
> standardization, *n:* the condition in which a standard has been achieved or effectively applied

- *Name some common standards.* (standard time, standard gauge, standard score, standard of living, standard operating procedure)

- *What is the performance standard used in this classroom and the others in this school?* (A = 90^+ = EXCELLENT; F = 64 = FAILING, etc.)

ACTIVITY...2...As the definitions above suggest, weights and measures are standards and they have tremendous significance in our lives.

Try to envision a world, or a society (town, country), without standard weights and measures. Discuss.

It might be entertaining and enlightening to role play a simple act of commerce or progress of a sports competition in which there are no standards.

- *Cite some examples of problems caused today in instances in which standards are at variance.* (tools, appliances)

Using some of the references cited in the BIBLIOGRAPHY, review with the class the events of the Ancient Olympic Games.

Measurement was not considered important during the Ancient Olympic Games... winning was the thing. For example, there were no weight classifications in boxing and a man of any weight might enter. Foot races were conducted over distances reckoned by stadium lengths (stade race: 1 length, approximately 200 yards; diaulos: twice the distance of the stade race) and among participants wearing armor. Records were not kept and would have had little meaning even if they had been since stadiums in different cities were of different lengths and because the Greeks had no instruments for measuring brief intervals of time.

- *How important were weights and measures in these Games? Explain.*

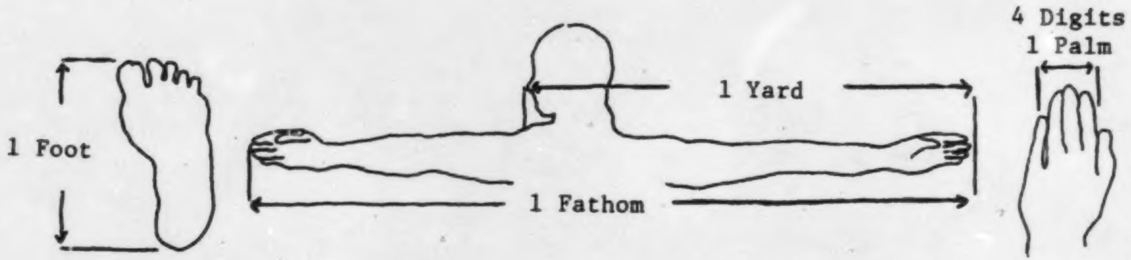
- *Discuss some of the shortcomings of this approach to athletic competition.*

- *Were weights and measures used in everyday life in ancient Greece? What were they?*

ACTIVITY...3...Using the encyclopedia and other references (See page 140.), develop an outline of the history of measurement.

In earlier times, linear measurements were based upon parts and proportions of the human body.

- *Define the following terms relating to measurement:*
  - *cubit* (the length of the forearm, or 6 palms)
  - *digit* (width of one finger [4 digits = 1 palm])
  - *hand; palm* (about 4 inches or digits) - still used to measure horses
  - *fathom* (the distance between a man's outstretched arms)
  - *foot*



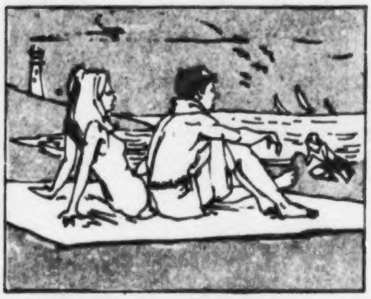
- *Why do you think that these measurements fell short of being "proper standards" such as the kind society requires today?*

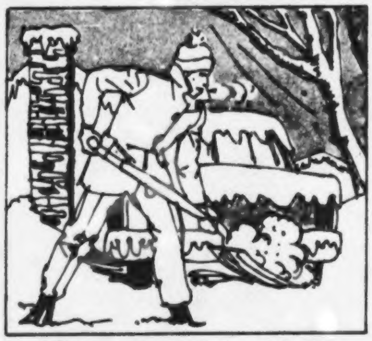
- *Apart from the answer hinted at above, what else do we know about the evolution of the human race through the ages that would make such standards inadequate?* (Human proportions have increased in size through the centuries.)

Read or discuss the paragraph below with the class.

* "Civilization forced man to communicate and to trade in such a way that misunderstandings would be minimal. Ambiguities in measurements of length, area, and volume had to be resolved. There was a need on the part of the government to set a standard for these measures. Just as three meant three, no more, no less when one counted, so too an arm's length of cloth had to mean one thing, no more, no less, no matter who the buyer or seller were. The old units were kept, but their meanings were now "codified" or "standardized" so as to maintain good order and ethical trade. The ruler set the standard: the foot was the ruler's foot; the inch, or *uncia*, the ruler's inch."

- *What do we call the system of measurement which is described in the last sentence of the paragraph?* (English system)
- *Do the English use this system?* (not any longer)
- *Who uses this system of measurement?* (the United States)
- *What system of measurement is used by almost everyone in the world?* (metric system)


25 Degrees Celsius


25 Degrees Fahrenheit

*ACTIVITY...4...*Discuss with the class the origin of the metric system.

The metric system was born as one of the many efforts at reform in France during the revolutionary era of the late eighteenth century. Reports to the Academy of Science of Paris by committees established to reform the system of weights and measures contained proposals which included the adoption of a decimal base for the new system. In 1791, the Academy proposed the name "meter" (from the Greek "metron" meaning measure) for a unit of length equal to one ten-millionth of the length of a quadrant of the earth's meridian.

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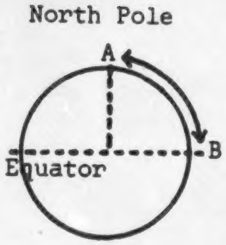
*Excerpted from Monograph on Metric Education for High School Teachers by Normand H. Cote, an unpublished document prepared for the Northeastern States Metric Education Consortium under a grant from the United States Office of Education.

1 meter = one ten-millionth ($\frac{1}{10,000,000}$) of arc AB



- *Why did the British, though invited, not immediately participate in the new system, thus preventing early worldwide use of metric?*

- *When did England adopt the metric system?*

- *Why has the United States not yet converted to the metric system?*

- *What are the advantages of having a single system of weights and measures for the entire world?*

Relate this discussion to the students' math work with the metric system.

The prevailing opinion among educators is that conversions from the metric system to the English measurement system and from the English to the metric should be a very small part of metric instruction. Many educators feel that conversion between the two systems should not be included at all. They feel that it is much better for the student to do his measurement thinking within one system. There is really little necessity for conversion between the systems.

If some conversion is desired, either to show relationships between units or for practice with multiplication and division, then conversion factors should be given to the pupils. They *should not* be required to memorize conversion factors. Estimates should be encouraged before computations.

The following relationships may be used:

1 cm = .39 in. (approx.)
1 m = 3.28 ft. (approx.)
1 m = 1.09 yd. (approx.)
1 km = 0.62 mi. (approx.)
1 kg = 2.2 lbs. (approx.)
1 l = 1.06 qt. (approx.)

1 in. = 25.4 mm
1 in. = 2.54 cm
1 ft. = 0.30 m (approx.)
1 yd. = 0.91 m (approx.)
1 mi. = 1.6 km (approx.)
1 lb. = 0.45 kg (approx.)

*ACTIVITY...5...*Provide the students with the METRIC ACTIVITIES SHEET on page 141.

REFERENCES...

Let's Use the Metric System. Albany, NY: New York State Education Department, 1974.

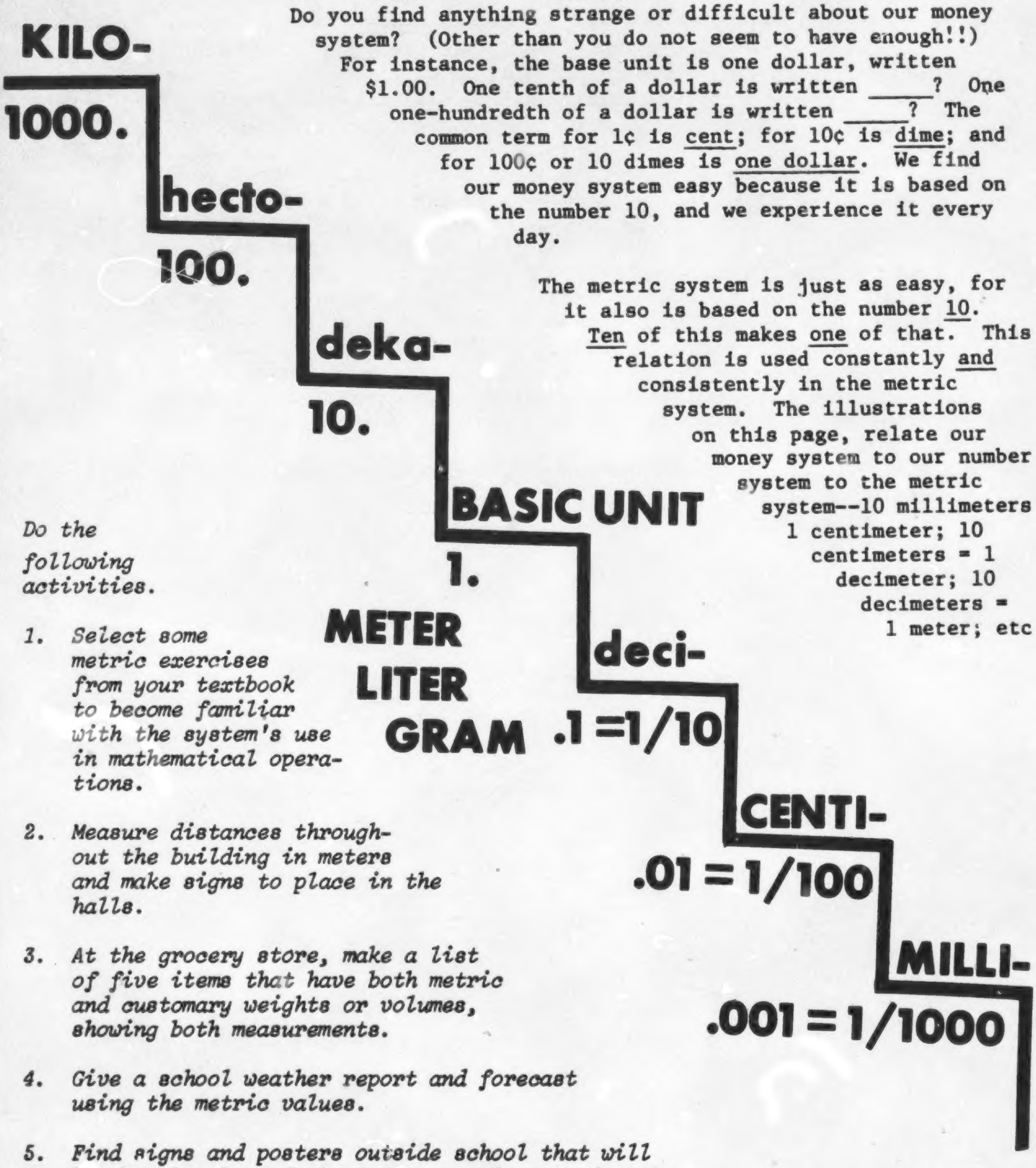
The Metric System. Reading, MA: Addison Wesley, 1974.

The Metric System: Ideas for Introducing the Metric System. Albany, NY: New York State Education Department, 1976.

METRIC ACTIVITIES SHEET

Do you find anything strange or difficult about our money system? (Other than you do not seem to have enough!!) For instance, the base unit is one dollar, written $1.00. One tenth of a dollar is written _____? One one-hundredth of a dollar is written _____? The common term for 1¢ is cent; for 10¢ is dime; and for 100¢ or 10 dimes is one dollar. We find our money system easy because it is based on the number 10, and we experience it every day.

The metric system is just as easy, for it also is based on the number 10. Ten of this makes one of that. This relation is used constantly and consistently in the metric system. The illustrations on this page, relate our money system to our number system to the metric system--10 millimeters = 1 centimeter; 10 centimeters = 1 decimeter; 10 decimeters = 1 meter; etc.



Do the following activities.

1. *Select some metric exercises from your textbook to become familiar with the system's use in mathematical operations.*
2. *Measure distances throughout the building in meters and make signs to place in the halls.*
3. *At the grocery store, make a list of five items that have both metric and customary weights or volumes, showing both measurements.*
4. *Give a school weather report and forecast using the metric values.*
5. *Find signs and posters outside school that will have to be changed when we go metric. Design the new signs and posters.*
6. *Go through magazines and newspapers. Find articles and ads in which the metric system is used.*
7. *Using a state road map, make a table showing the metric distances from the school to cities around the state.*

6 COMPETING WITH NATURE

*OBJECTIVES...*to identify the forces that the Olympic athlete encounters during an event...to discuss the forces that can be unleashed by the athlete during participation in an Olympic event...

BACKGROUND..."The important thing in the Olympic games is not winning but taking part," according to the great proponent of the Modern Games, Baron de Coubertin. Winning and taking part, like all physical human activity, involves more than competition with the other athletes, for there are the forces of nature to contend with. The serious athlete must identify and explore the meaning of these forces and then determine how to best struggle with them. He/she can never hope to "defeat" such forces but can strive to take advantage of and to cooperate with them in a particular event. Winning, or performing well, often depends upon understanding, accommodating, and even exploiting these forces.

*ACTIVITY...1...*Demonstrate and define for the students each of the following concepts:

- Force
- Vector
- Inertia
- Friction

- *Why is it important for athletes to understand the meaning of these concepts?*

*ACTIVITY...2...*Organize the class into five groups, each with the assignment to select one of the Olympic events below and find out how the event is performed. Literature cited in this publication and elsewhere pertaining to these Olympic events and the sports they represent should provide the information the students require.

- Shotput
- Ski Jump
- Diving
- Weightlifting
- Pole Vault

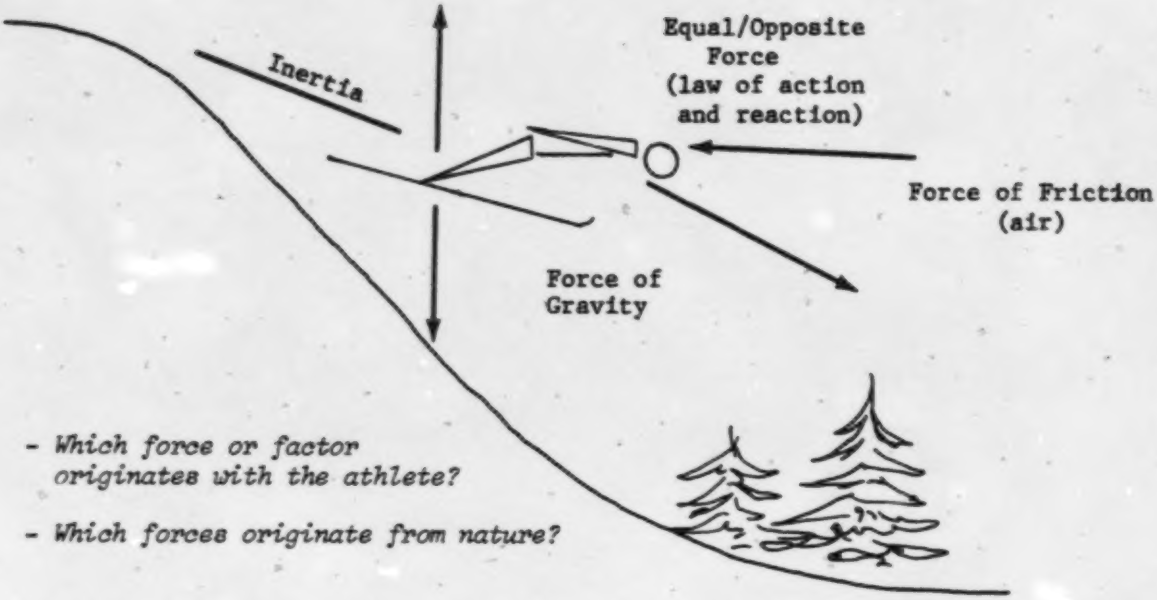
Report on the object of the Olympic activity which your group selected.

Pantomime the essential moves made by athletes competing in this event, while defining these moves in terms of the concepts discussed in ACTIVITY 1.

- *Can you sense or feel the force of gravity, the friction, or the inertia?*

- *Name some other Olympic events which also lend themselves to an understanding of these concepts.*

*ACTIVITY...3...*Direct each of the students to make a simple diagram of the assigned Olympian in action using a stick drawing to represent the athlete and arrows and labels to indicate the origin and direction of the forces (vectors). Disregard the magnitude of each force. As an example, present the ski jumper depicted on the next page.



- *Which force or factor originates with the athlete?*
- *Which forces originate from nature?*

*ACTIVITY...4...*Conclude the unit by considering some of the following related ideas, tasks, and questions.

Construct, with art teacher and student assistance, profile models in wood of athletes which, in suspension, demonstrate the concept, "center of gravity.."

Explain the basic concepts of potential and kinetic energy.

- *In the case of each athlete pantomimed in* ACTIVITY 2, *at what points or positions did the movement represent potential energy? kinetic energy?*

Review with the students the concept of matter and the force of gravity. Have each write a brief story describing how many Olympic athletes compete against matter and the "forces of nature."

- *Consider other natural forces which influence athletic events. (For example, some track and field results are disallowed as records because the performance was aided by the wind.)*

Help the class develop a summary of these athletic events analyses for presentation to physical education and other classes. Use the sketches and models for illustration.

REFERENCES...

Ecker, Tom et al. Olympic Track and Field Techniques; An Illustrated Guide. Englewood Cliffs, NJ: Prentice Hall, 1974.

Freeman, Ira. Physics Made Simple. Garden City, NY: Doubleday, 1965.

Rules of the Game. Illustrated encyclopedia of world sports. London; Diagram Group, Paddington Press Ltd., 1974.

Weisler, Jules. Physical Science: Intermediate Level Review Test. New York: AMSCO School Publications, 1970.

6

ALL SYSTEMS GO

OBJECTIVES...to gain a basic understanding of those systems of the human body that most directly affect the performance of an Olympic athlete...to know the life functions most essential to the success of every Olympic competitor...to be able to name and define those substances responsible for the proper maintenance and operation of the human machine during strenuous activity...

BACKGROUND...World class athletes who continually threaten, and frequently surpass, national, international, and Olympic records most assuredly have all of their biological systems operating at peak efficiency. Athletes such as Mark Spitz (USA - Men's Swimming), Valeri Borzov (USSR - Men's Track and Field), Bruce Jenner (USA - Decathlon), Annagret Richter (E. Germany - Women's Track and Field, and Kornelia Ender (E. Germany - Women's Swimming) have captivated the world's imagination and admiration with their record-setting performances because each was keenly aware of the operation and potential of his/her anatomy and physiology. These structures and functions of the human body comprise a wonderful, complex machine. This "machine" is especially fascinating when its thoroughly trained biological systems are challenged and combined into a unit of power, speed, and beauty.

ACTIVITY...1...Provide the class with a short visual presentation of a performing athlete, preferably a film loop. Directly after this, use charts, overhead projection transparencies, and/or handout diagrams to show them the location, size, and general structure of the hyman integument (skin), muscular, sketetal, respiratory, circulatory, and nervous systems. Now rerun the visual at slow speed.

- *Can you see or detect any of these systems in action?*
- *Which of the systems is (are) not visibly active?*
- *What does each system do to make this type of physical activity possible?*

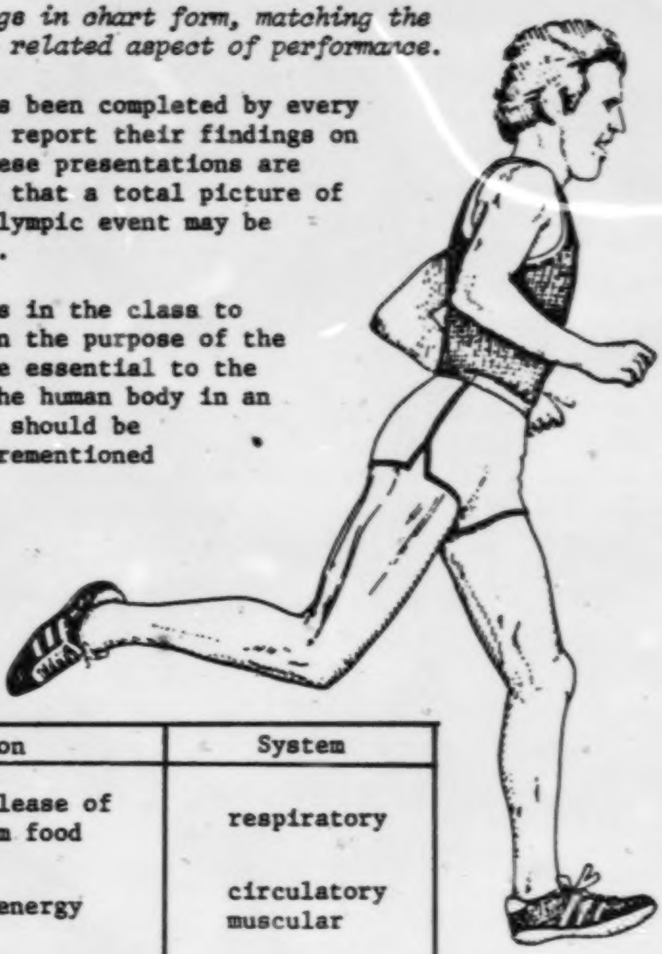
(NOTE: The students should realize the existence of four other systems essential to the survival of the human animal: digestive, excretory, endocrine, and reproductive.)

ACTIVITY...2...Organize the class into six groups and assign to each group one of the aforementioned human systems. Appoint group leaders. Direct the groups to accomplish the following:

> *Do research on human biology to determine the function(s) of each of the systems. For example, the skeletal system provides support and shape for the entire body, protection of inner organs, and the structure for locomotion (leverage, etc.).*

Learn the relationship of each system's functions to athletic performance.

Prepare your group findings in chart form, matching the system's functions to the related aspect of performance.



After the previous activity has been completed by every group, direct group leaders to report their findings on the assigned system. While these presentations are being given, correlate them so that a total picture of the athlete performing in an Olympic event may be visualized by the entire class.

*ACTIVITY...3...*Ask the students in the class to identify and to briefly explain the purpose of the substance or materials that are essential to the maintenance and operation of the human body in an Olympic event. Each substance should be associated with one of the aforementioned functions and systems.

For example:

Substance	Function	System
oxygen	aids in release of energy from food	respiratory
sugar (glucose)	source of energy	circulatory muscular
carbon dioxide (waste)	helps to regulate breathing rate	respiratory
water	transport temperature regulation	respiratory integument
salts	muscle regulation	circulatory muscular

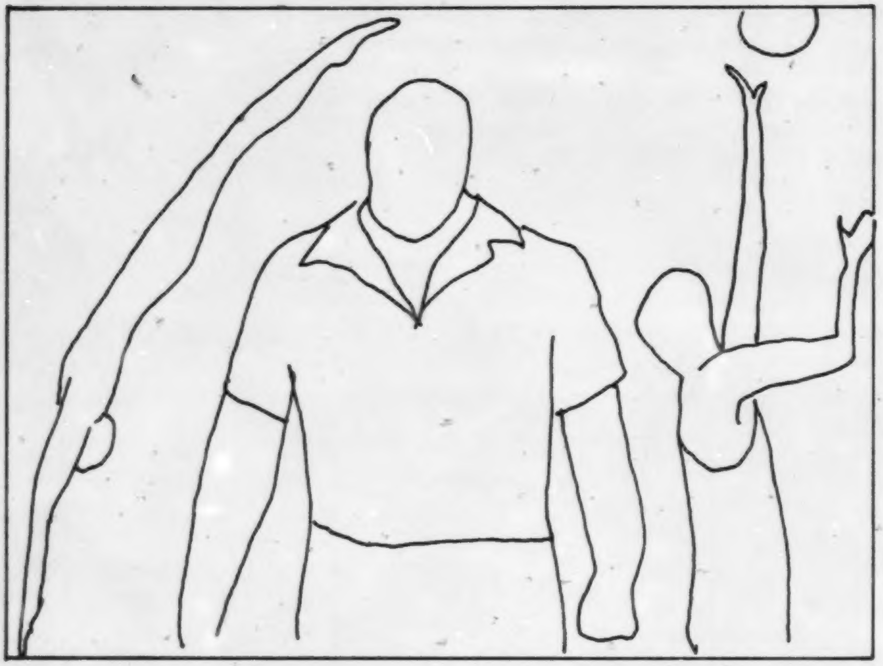
*ACTIVITY...4...*Enlist the assistance of the librarian in finding appropriate references and ask the school nurse to provide background information during a visit to the class so that the students may profitably discuss the questions which follow.

- *Predict the condition and symptoms of a long distance runner if one of the substances mentioned in* ACTIVITY 3 *is suddenly reduced, then withdrawn altogether.*

- *Define oxygen debt, oxidation, ATP (adenosine triphosphate) energy, and fatigue. What do each of these have to do with the previously discussed functions and systems?*

- *Discuss heart rate, pulse, blood pressure, breathing rate, and reaction time. Are these factors important to the athletes? Explain.*

There are many different types of athletes in the Olympics - the wrestler, bobsledder, 100-meter sprinter, speed skater, gymnast, basketball player, weightlifter, etc. Discuss why and how the physical makeup of people helps to determine the type of competition they should attempt.



- *Considering the kind of body you have, which type of Olympic event might suit you best?* (Pause for laughter.)

- *Discuss the following statement by the great English miler, Roger Bannister: "There is a need to feel our bodies have a skill and energy of their own, apart from the humanmade machines they may drive. There is a desire to find in a sport a companionship with kindred people. I have found all of these."*

REFERENCES...

Best, C. H. and Taylor, N. B. The Human Body: Its Anatomy and Physiology. New York: Holt, Rinehart, and Winston, 1963.

Richmond, Julius, B, M. D. et al. Health and Growth: Book 5. Glenview, IL: Scott Foresman, 1971.

AN OLYMPIC DAY

K-6

OBJECTIVES...to call attention to the significance of the Olympic Games as a world event through the staging of a school-wide Olympic Day...to use a highly visivle event such as Olympic Day to generate interest in the Olympics and Olympism and to reinforce the other learning activities for students at all grade levels as provided in this guide...to provide an opportunity to focus on either the Ancient or the Modern Olympic Games...

INTRODUCTION...This unit may serve as a culminating exercise for the entire school after other units in this publication have been used throughout the school at the grade levels indicated for each. Experience suggests that responsibility for staging this event should probably reside with the students and teachers of the sixth grade. Notwithstanding this recommendation, it is obvious that there will be numerous, appropriate opportunities for younger children to assist and participate, as well as observe, some of which are alluded to throughout these instructions.

The unit is designed to enable the planners to emphasize either the Ancient or the Modern Olympic Games (or both, possibly) as the theme of the celebration.

GENERAL PROCEDURES...

1...Form a planning committee comprised of at least one student from each sixth grade class; every sixth grade teacher (initially); the primary and intermediate grade level chairpersons, or persons designated to represent those areas generally; and a school administrator.

2...Review and discuss this unit outline, making appropriate adaptations and modifications.

3...Decide whether the theme of the program will be Ancient or Modern.

4...Establish guidelines for determining the level of effort, and thus, the size and impact, of the celebration to be mounted.

5...Announce, a month or more in advance, the intention to hold this celebration, including a tentative date.

6...Recommend that the Olympic infusion units in this publication be incorporated into the instructional program by all teachers during the interim.

7...Appoint subcommittees of students and teachers appropriate to the tasks outlined in the procedures which follow.

8...Opt for either Ancient or Modern and proceed with the instructions in that column, beginning on the next page.

ANCIENT

(1) Develop a geography/history unit for the World, 800 B.C. - 300 B.C., which emphasizes Greece.

- *Study the preeminence of Greece during this period of world history.*
- *Provide a setting by describing the world* outside *the Greek sphere of influence.*
- *Learn about the Greek city-states.*

MODERN

(1) Embark upon an in-depth study of the nation designated as the host for the Olympic Games (school's choice as opposed to the current designee of the International Olympic Committee).

- *Learn about the geography, history, and culture of the host nation.*
- *Explain the reasons for choosing this nation to be host.*

(2) Discuss the origins and purpose of the Olympic Games. Make appropriate reading assignments.

- *Write a brief report on the event...the Games themselves.*
- *Find out when the Modern Olympic Games began and why. Prepare a brief, annotated outline of some of the significant occurrences in the history of the Modern Games (wartime interruptions; expansion; participation of women; "Nazi" Olympics; terrorism in Munich; etc.).*

(3) Use Olympism units from this publication as appropriate

COMMITTEE RESPONSIBILITIES

(1) Olympic Committee

(1) International Olympic Committee (IOC) -

This committee should include one boy and one girl from each sixth grade class (or, group of students in smaller schools).

- *Select a city-state for each class (group) to represent.*
- *Establish a procedure for choosing an Emperor (and/or Empress) to preside over the Games.*

- *Elect an IOC chairperson to preside over the Games.*
- *Select a nation (must include host nation and Greece) for each class (group) to represent.*

Select a date, time, and place for the Olympics.

Coordinate the Games - ending awards ceremony.

(2) Athletic Events Committee - This committee would be responsible for doing the research appropriate to making recommendations for the competitive events to be held as well as for the modifications of these events which will permit them to be performed by sixth graders.

ANCIENT	MODERN
• *Sample Recommendations:*	• *Sample Recommendations:*
- Stade race (orig., 1 length of the stadium, approx. 200 yds., now, 50 yds.)	*- 50-yd. dash (instead of 100-meter)*
- Diaulos race (orig., double; now, 100 yds.)	*- 100-yd. dash (instead of 200-meter)*
- Dolichos race (orig., a long run; now, 200 yds.)	*- 200-yd. race (instead of 800-meter)*
- Marathon (orig., approx. 26 miles; now, 1 mile)	*- Mile run (instead of 5,000-meter)*
- Race wearing armor (now, wearing cardboard armor or subst. a 3-legged race.)	*- Basketball (3 on 3); or, Cycling (2 or 3 miles on an oval track or around the playground)*
- Hop, step, and jump (triple jump)	*- Triple jump*
- Long jump (same)	*- Long jump*
- Pentathlon (a combination of five from above, possibly substituting frisbee-throwing and arm wrestling for a couple of them.	*- "Decathlon" (use only five events from above, possibly substituting frisbee - throwing and arm wrestling for a couple of them.*

Once the Athletic Events Committee is notified of the Olympic Committee's decision on which events will be included, its members should prepare a schedule of tryouts. Each class or group will then conduct these tryouts to determine which students will be its representatives in the events.

(3) Decorations and Awards Committee - This committee will be responsible for approving designs and coordinating the production (or acquisition) of costumes, uniforms, numerals, banners, flags, and awards. (The actual production of all but the awards will be carried out by each class (group).

• *Prepare a crown(s) for the Emperor (and/or Empress).*	• *Approve uniform specifications for event participants.*
• *Design facsimiles of olive branch crowns to be awarded to winners.*	• *Design the medal awards for winners.*
• *Approve city-state banners.*	• *Approve national flag designs.*
• *Suggest uniform and costume requirements for the participants.*	

(4) Social/Cultural Events Committee - This committee will approve and schedule the presentation of songs, poems, fables, slide shows, photo essays, posters, art work, and other products of the work done by students in all grades as a result of the use of the units in this publication (and any other achievements deemed appropriate to the occasion). NOTE: Although this was a feature of the Ancient Games, many people have suggested that the organizers of the Modern Games should take note of the splendid example. The violinist Yehudi Menuhin, is one who agrees: "Music provides the gymnastics of the soul, and gymnastics are the music of the body." *Discuss.*

SPECIAL NOTE...Obviously, coeducational participation is presumed. However, it should be noted that, during the Ancient Games, even once women were permitted to attend and observe, there were definite, unequal, male-female role responsibilities which reflected society in general. You will want to decide at the outset whether, if it is the Ancient Games the school is recreating, authenticity or modernism shall prevail.

RELATED ACTIVITIES...

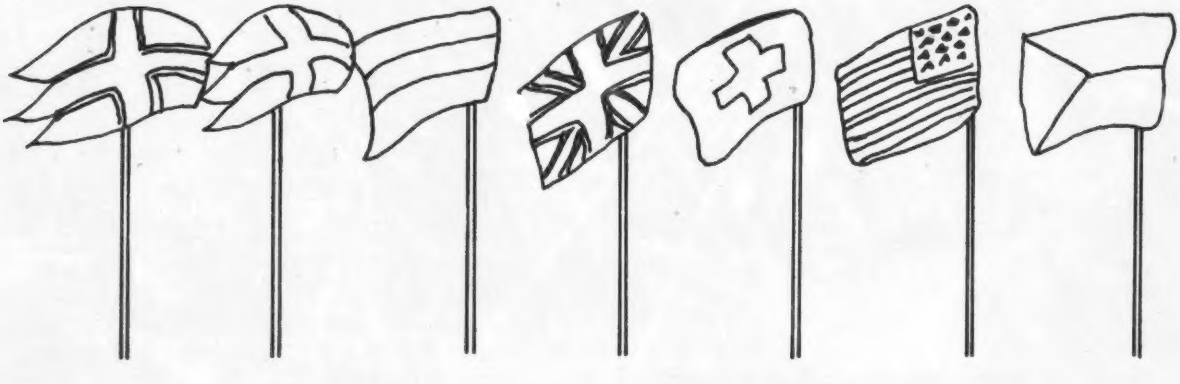
There are countless additional ways, limited only by the imaginations of teachers and students, in which the Olympic Day program may be enlarged and enhanced. Below is a partial listing of such suggestions which might be considered for either Ancient, Modern, or, in some cases, both, versions of the Games.

- Entertainment. Skits; fashion show; songfest; national dances; international food fair.
- Publicity. Develop a program or brochure for the school community; arrange local media announcements; photograph or film the event.
- Program. Simulate the ceremonial aspects of the games as carefully as possible in order to enhance the credibility of the entire program.
- Projects. Select from the following activities. Participation may be either competitive or noncompetitive.
  - constructing models of equipment used in the athletic events
  - building a clay (or plaster of paris) structure of a famous landmark (Eiffel Tower, Parthenon, Statue of Liberty)
  - writing an original limerick using the name of a participating country:

    There was a young man from Peru,
    Who wanted to live in a zoo...etc.
  - designing an Olympic torch

- photography contest, black/white and color categories (Use a variety of themes such as sports, national flags and costumes, and "children of many races"...portrait photos.)

- assembling collages using numerous themes
- constructing models of stadiums, arenas, courts, rinks, ski jumps, any site where games are held
- making crafts that reflect the cultures of a variety of nations (needlework, crocheting, knitting, woodcarving, candlemaking, etc.)
- drawing or sketching historic scenes representative of the participating nations
- making national flags...as banners, as quilts, as cake decorations, etc.
- writing an original Olympic oath which mentions fair play, good sportsmanship, the benefits of participation, the value of competition, etc.
- constructing dioramas which represent life, history, art, or sports in one of the participating nations
- designing native costumes



REFERENCES...

Yack, Tom, et al. Olympmetrics. Westland, MI: Project Metric, Wayne-Westland Community School District, 646 N. Wayne Road, Westland, MI, 48185.

Use other appropriate references from the BIBLIOGRAPHY on pages 155-157.

APPENDIX - OLYMPIC CONCEPTS

The following are concepts which seem to epitomize the activity and spirit which are the Olympic Games and characterize or expand upon the central concept of Olympism. The concepts are provided as evidence of the relationship between Olympism and many objectives of the instructional program and, as such, serve as bridges between the two. As suggested in the INTRODUCTION, you may wish to use these concepts in assessing student awareness before and/or after using the unit material.

- olympism
- competition
- comradeship (camaraderie)
- commendation
- emulation
- cooperation
- participation
- brotherhood
- fitness
- recreation
- mental health
- sportsmanship
- safety
- achievement
- pride
- courage
- amateurism
- professionalism
- victory
- defeat
- environmental impact
- economic impact
- cultural awareness
- humility
- tolerance
- individual differences
- respect
- self-worth
- citizenship
- energy consumption
- endurance
- persistence/tenacity
- responsibility
- appreciation
- leadership
- (self-)confidence
- opposition
- disputation
- contention
- nationalism
- patriotism
- feminism
- terrorism
- ethnicism (ethnicity)
- aggression

OLYMPIC UNDERSTANDINGS

The understandings below describe the Olympics Games as a social, athletic, political, emotional, spiritual, educational (..., etc.) world "event." They also suggest what some of the desirable outcomes of a study of Olympism might be and, as such, may be used to measure what students have gained from participation in the unit activities. (A number of these statements, which some will recognize, are thoughts, actual, and paraphrased, of Baron Pierre de Coubertin and Avery Brundage.)

The motto of the Olympics, "Citius, Altius, Fortius," means swifter, higher, and stronger. The motto is a fitting one for any competition, but it is also an important motto for all human activity since it prescribes no limits on man's ability to improve the human condition.

The Olympic Games are a series of sporting events involving fair and friendly competition for amateur athletes, which are sponsored by the nations of the world.

Merely participating in the Olympics is a victory in itself. The failure to win a medal should not detract from the honor of having participated in a contest with the world's best athletes.

The Greek ideal for the Ancient Games held at Olympia is worthy of emulation in today's world — the spirit of the Games should be used to help our citizens to grow into strong, able, beauty-loving, and wise citizens.

> The Greeks might decry the flags, anthems, and nationalism inherent in the Modern Games. The Olympics would be far better if all of us could exult in a victory, regardless of a person's race or nationality. Such an exultation in the Games could be used as an effective vehicle for fostering peace and international understanding.

Although there are a number of team events, the Olympics emphasize individual competition.

> Americans have diverse, ethnic backgrounds. We can take special pride in the achievement of athletes from the different nations participating in the Games.

The Olympic Games take place every four years and are comprised of Summer and Winter Games.

> A great deal of planning, work, coordination, and cooperation must take place throughout the world in order for the Olympic Games to occur.

The Olympic Games promote and encourage the physical, moral, and cultural education of the youths of each participating country so that their health, patriotism, character, and citizenship may develop fully.

> The Modern Olympic Games have a long and rich heritage from the Ancient Games at Olympia. A study of the ancient games can teach us the benefits of the ancient games and the flaws that led to their demise.

Sports are a mirror of humanity, reflecting human struggle, accomplishment, progress, victory, and defeat.

> The principles of fair play and good sportsmanship taught through sports have applicability to other human experience. Life itself is a form of competition and our movement through our lives can be helped by sports experience.

Games are an expression of a peoples' culture.

> Sports should be valued for the fun they provide.

Sports can serve to enrich the lives of individuals by providing them with opportunities to play, to relax, and to socialize.

Games can be played by people paid to play the game (professionals) and people who play the game for fun (amateurs). The Olympic philosophy supports amateurism as the ideal; however, professional athletes can find the same values in competition as those who engage in sports for pleasure.

The Olympic Games strive to maintain the highest levels of amateurism. Today's commercial world poses a threat to the ideal of amateurism.

Professionalism in sports can distract from the values inherent in sports by emphasizing victory over participation.

Spectators at sporting events can develop the misguided view that spectating is equal to actual participation in the sport itself.

The games at Olympia celebrated achievements of the mind as well as achievements of the body. Recreation in modern days should encourage physical competition, but it should also stimulate and encourage the fine arts.

The Olympics and other sports events can be used to encourage international cooperation in areas other than sports.

The Olympics, and sports in general, can emphasize what human beings of various national groups have in common in order to minimize national differences.

Participation in sports stimulates a curiosity about the human body and its functions and how these functions contribute to improved performance. Such curiosity can encourage a search for, and an acceptance of, good health practices.

Involvement in sports that support the ascendancy of participation over winning can make a positive contribution to good mental and emotional health.

The violence at the Munich Games (1972) demonstrated a world's vulnerability to terrorism and dramatized the need for a worldwide commitment to law and order.

Television provides us with an instant view of Olympic competition. Such a view can expand the impact of the Olympics but it can also identify and exacerbate problems with the Olympic Games.

International relations have a direct effect on the Olympics; the selection of the host city; eligibility of competing countries; and the selection process for the teams. Such effects can be both positive and negative.

The Olympic Games are metric games. They provide a practical means of introducing metrics to nonmetric countries and peoples.

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